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Some Inuit Concerns with Economic and Other Aspects of Transport

Final Report

Prepared for the
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Transport Canada

November 1982

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SOME INUIT CONCERNS WITH ECONOMIC AND OTHER IMPACTS OF TRANSPORT ACTIVITIES

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The contents of this report reflect the views of the contractor and of Inuit organizations, and not necessarily the official view of the Transportation Development Centre or other government agencies.

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17 Abstract

This report presents 126 recommendations proposed by Inuit organizations to the arctic transport system. These recommendations are supplemented by a report on transport costs in this region.

Issues covered include the relationship between northern transport and sovereignty priorities, and the relative costs of northern transport in Canada. A subsidy formula is discussed, as well as tax treatment of Inuit daily transport, Inuit targets in employment and training for transport enterprises, and ownership and joint venture agreements.

The environmental risks inherent in certain transport modes, notably shipping, are outlined from the Inuit viewpoint. A proposed regulatory and administrative response is suggested.

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FOREWORD

A summary of this report was presented by Marc Denhez for Inuit Tapirisat of Canada at the Northern Transportation Conference, The Challenge of the Eighties held in Whitehorse, Yukon, in October 1982.

PREFACE

The following is a summary of the 120 page report which was presented at the Northern Transportation Conference (Whitehorse, October 1982), at "Session II ECONOMIC, ENVIRONMENTAL AND SOCIAL CONSIDERATIONS." The proceedings of that conference, including the said report, are published by the Canadian Transportation Research Forum

The report was prepared with the generous financial assistance of theTransportation Development Centre, the Department of Indian Affairs and Northern Development, and the Department of Consumer and Corporate Affairs.

The report was prepared for Inuit Tapirisat of Canada, (ITC), the national organization representing the Inuit population. ITC is an incorporated registered charitable organization. The report was prepared by Marc McC. Denhez, B.C.L., counsel for ITC. Marc Denhez is with the firm of QUAIN, DIOGUARDI, 400 Cumberland Street, Suite 1100, Ottawa, Ontario K1N 8X3.

SOME INUIT CONCERNS WITH ECONOMIC AND OTHER IMPACTS OF TRANSPORT ACTIVITIES

ABSTRACT

Marc Denhez for Inuit Tapirisat of Canada

Part 1. Introduction

Canada's effort to assert sovereignty in the Arctic have traditionally focussed on keeping transport *out* and by emphasizing protection of Inuit (e.g. the *1930 Treaty with Norway*). In the 1960's, this changed to assisting transport to come *in* (e.g. with icebreakers). The new approach (e.g. the *Sir John A. Macdonald* assisting the *Manhattan*) has not shown great results in asserting sovereignty over the Arctic offshore (e.g. vis-à-vis the U.S.A.).

The classic approach to asserting sovereignty is to assert that the local population is part of the *national mainstream*, and of expressing that fact by *integrating that population to the national transport grid* (e.g. as Canada did with B.C., Newfoundland etc.). This is a preferable approach for the North.

The traditional way to integrate a population to this national grid is to provide a *developed infrastructure*, or else to *simulate* a developed infrastructure through subsidies. Canada has done this e.g. for British Columbia, the prairies, the Maritimes and Newfoundland.

Part 2. Level of Service

Although it is not possible to provide the North with a fully developed infrastructure, some needs are *immediate*. Every community should have an *adequate airstrip*. It is unacceptable to have places where one can only land on water (e.g. Labrador, where a fast freeze-up means planes have to be chipped out of the ice), or where the airstrip is dangerous (e.g. the 11 Quebec airstrips where every landing is technically illegal). Long delays in repairs are unacceptable (e.g. Grise Fiord where 12 years after a government report, the approach is still "directly into the cliff").

Ice strips are *not* an acceptable substitute. Planes, bulldozers, loaders etc. fall through the ice (e.g. Northern Quebec).

Terminals should exist so that people do not have to stand on the tundra waiting for the plane.

Reliable service is essential (e.g. Labrador should not have to rely on the Luftwaffe for a medical evacuation). Navigational aids are essential; and the performance of airlines should be monitored.

Routing should be more direct (e.g. not like Kuujjuaq - Nain, where a 300-mile trip requires 2000 miles of travel), with fewer layovers (e.g. across Hudson Bay from Coral Harbour to Sanikiluaq, which requires 5 days).

An adequate *reservation* system should exist.

Northerners should not be victimized by *discriminatory rules on luggage* (e.g. northern weight limit of 44 lbs. as opposed to Air Canada's limit of 140 lbs.). Tagging and unloading should be improved (e.g. so that it will not take 1¼ hours to get luggage).

Cargo delivery should be accelerated (e.g. so places like Coral Harbour will not get 2-3 shipments of rotten meat every summer).

Facilities should provide for the disabled and elderly.

On board, there should be *safety announcements* in the local language, local food and a renewed effort to obtain local personnel. Aisles should not be blocked with cargo.

Sealift's cost and facilities should be improved (e.g. Kuujjuak's ship dropped a truck in Ungava Bay when its rusted derek fell over). Routing and timing should be mutually consistent with local needs (e.g. northern budgetary allocations should be timed to come in time for sealift orders instead of afterwards).

Part 3. Cost

Northern transport offers almost no·infracture or choices, and so can be labelled "underdeveloped". This underdevelopment generates high transport costs (e.g. 10% -40% more per mile than in the south) which, in turn, cause a higher cost of living (e.g. prices at The Bay in Frobisher being *twice* southern prices, except for alcohol for which is subsidized. Instead of fully addressing costs (which the government exhaustively monitors), the government selectively subsidizes a *handful* of employees (mostly southerners) to compensate them. This discriminatory approach is inconsistent with Canadian practice: elsewhere in Canada, the infrastructure has either been provided, or general subsidy formulas were adopted to compensate.

A similar subsidy program (with certain special provisions for food) should be introduced in the North, to *bring northern costs in line with those of a developed system.*

A system of discounts, while desirable, is not a substitute for such an approach.

Part 4. Daily Transport

Hunters should receive the same excise tax exemption as other food producers, and should not pay gasoline "road taxes" where there are no roads.

Part 5. Transport as Enterprise

Employment targets for Inuit are feasible. The government has targets for its own operations, but should *implement* them (e.g. by lifting the exemption on Crown corporations and by providing resources to the supervisory organization as recommended by the Parliamentary Committee).

Employment should be located in the North with regular connections to the home community.

Training programs should also be located in the North or have regular return trips. They should emphasize "hands-on" training for short but very intensive durations (unlike the Flight Service Specialist program which had 100% attrition), with appropriate trainers (unlike the Coast Guard trainers who suffered from "chronic seasickness"). Programs should be developed in consultation with the Inuit organizations (e.g. in design, advertizing and selection of candidates). Pay and other features should reflect northern conditions. A community orientation should be emphasized.

Inuit can consider the creation of new carriers, the acquisition of shares in existing carriers, or the launching of joint ventures with carriers. Such joint projects should develop a pattern of local participation in transport ventures.

Part 6. Environment Effects

Inuit insist on an environment which protects wildlife. Projects which have risks of oil spills (e.g. shipping) are suspect, and the wreck of the *Edgar Jourdain* inspires little confidence in the technical or *administrative* capacity to clean up (9 months of buck-passing to clean up spill at Hall Beach). Noise and wash from ships also cause problems and ice breakage is a hazard to animals and man (e.g. the 6 Arctic Bay hunters who were stranded for 3 days and almost killed by the wake of the *M.V. Arctic*).

Roads may also introduce contaminants or upset wildlife. Inuit will accept any such development only if wildlife is safeguarded and Inuit participate in the proceeds, planning, monitoring and supervision of these projects.

Part 7. Regulatory Aspects

If the CTC is not in a position to adequately supervise northern transport, a subsidiary agency should be established for that purpose In any event, such an agency should exist to manage the northern pricing system discussed earlier; the agency will also dovetail with land claims proposals.

The planning, monitoring and supervision of transport should be part of a larger planning process, with Inuit participation.

Part 8.Conclusion

"*We're tired of being treated like Canada's attic... We want to be treated like the rest the house*" Michael Amarook.

N.B. The above concerns give rise to *123 specific recommendations* outlined in the paper.

TABLE OF CONTENTS

PAGE NO.

PART. 1. INTRODUCTION

1.1 General 1.
1.2 Approach 2.
1.3 Inuit and National Policy 3.
1.4 Integration to the National Grid 6.

PART 2. LEVEL OF SERVICE

2.1' Introduction 9.
2.2 Air Facilities 12.
2.2.1 Airstrips and Equipment 12.
2.2.2 Ice Strips 18.
2.2.3 Terminal Facilities 19.
2.3 Service 19.
2.3.1 Frequency and Reliability 19.
2.3.2 Routing 21.
2.3.3 Reservations 22.
2.3.4 Luggage 23.
2.3.5 Cargo 24.
2.3.6 Access 25.
2.3.7 In-flight Service 26.
2.4 Sealift 28.
2.4.1 Cost 28.
2.4.2 Facilities 28.
2.4.3 Shipping Practices 29.
2.4.4 Flexibility of Routing 29.
2.4.5 Timing 30.

PART 3. COST

3.1 Introduction 30.
3.2 Some Costs 30.
3.2.1 A Comparison of Passenger Costs 30.
3.2.2 Cargo Costs 34.
3.2.3 Unpredictability of Air Costs 34.
3.3 Impact on Cost of Living 35.
3.3.1 General Tendencies 35.
3.3.2 Case Study: Food 37.
3.3.3 The Government Response 38.

3.4 THE EQUIVALENT OF A DEVELOPED SYSTEM 42.

3.4.1 INTRODUCTION 42.

3.4.2 NATIONAL PRACTICE 42.

3.4.3 Theoretical Implications 44.
3.4.4 Practical Implications 45.
3.5 Application 46.
3.6 Adjustments to Subsidies 50.
3.7 Discounts 51.

PAGE NO.

PART 4. DAILY TRANSPORT 52.

PART 5. TRANSPORT AS ENTERPRISE 54.

5.1 *General* 54.
5.2 *Employment* 56.
5.2.1 *Employment Targets* 56.
5.2.2 *Profile of Employees* 61.
5.2.3 *Design of Programs* 63.
5.2.4 *Location of Employment* 65.
5.2.5 *Commuting* 66.
5.3 *Training Programs: General* 66.
5.3.1 *Menial vs. Skilled Job* 66.
5.3.2 *Some Basic Features* 67.
5.3.3 *Organization* 70.
5.4 *Training Programs: Specifics* 72.
5.4.1 *Market Adjustments* 72.
5.4.2 *Advertising* 73.
5.4.3 *Entry Requirements* 74.
5.4.4 *Location of Training* 76.
5.4.5 *Levels of Remuneration* 77.
5.4.6 *Trainers* 78.
5.4.7 *Initial Training* 79.
5.4.8 *Personalized Attention* 79.
5.4.9 *Course Content* 80.
5.5 *Community Orientation* 83.
5.6 *Participation in Corporate Ventures* 83.
5.6.1 *Introduction* 83.
5.6.2 *Equity in General* 84.
5.6.3 *Creation of New Carriers* 86.
5.6.4 *Aquisition of Existing Shares* 87.
5.6.5 *Joint Ventures* 87.
5.6.6 *Joint Administrative Features* 91.

PART 6. ENVIRONMENTAL EFFECTS

6.1 *General* 92.
6.2 *Basic Philosophy* 92.
6.3 *Shipping* 94.
6.3.1 *Oil Spills* 94.
6.3.2 *Noise* 95.
6.3.3 *Ship Wash* 100.
6.3.4 *Ice Breakage* 100.
6.3.5 *Problems to be Avoided with Roads* 102.
6.3.6 *Summary of Environmental Viewpoint* 103.

PART 7. REGULATORY ASPECTS

7.1 *Basic Objectives* 104.
7.2 *The "Job" to be Done* 104.
7.3 *The Democratic Element* 107.

PART 8. CONCLUSION 108.

APPENDIX OF CONSOLIDATION LIST OF RECOMMENDATIONS 111.

SOME INUIT CONCERNS WITH ECONOMIC AND OTHER IMPACTS OF TRANSPORT ACTIVITIES[1]

by: Marc Denhez[2] for *Inuit Tapirisat of Canada.*[3]

Sovereignty; transport and national integration.

Developed vs. undeveloped systems; airstrips; facilities; safety; ice strips; terminals; service; routing; reservations; baggage; access; sealift; timing.

Impact of underdevelopment on costs, passengers, food; simulating a developed system; subsidies; impact and mechanics; discounts.

Daily transport, excise taxes and gas taxes.

Participation; employment; location; commuting; training; organizations; eligibility; pay; course content; equity; new ventures; joint ventures and administration.

Environment; oil spills; ship wash; noise; icebreaking; roads; supervision and planning.

Regulation; effectiveness in planning; democratic control.

PART 1 INTRODUCTION

1.1 General

Inuit constitute over 80% of the Arctic population. They are represented by ITC and regional organizations[4] covering over one third of Canada.[5]

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[1] Study completed with financial assistance of DIAND (re training, employment and equity) and the Transport Development Centre (re subsidy options). Basic source of information: communities, via regional Inuit associations. With the help of researcher Allysson McDonald, and the economic consultancy of R.S. Wallace Associates under contract.

[2] Of the law firm of Quain, Dioguardi, Ottawa, Ontario.

[3] ITC, the national organization which represents this country's Inuit population, is a non-profit corporation under Part II of the *Canada Corporations Act*.

[4] The Labrador Inuit Association, the Makivik Corporation (in northern Quebec), the Keewatin Inuit Association, in the Baffin Region Inuit Association and the Kitikmeot Inuit Association (in the Central Arctic). Accordingly, this paper concentrates on the geographic area north of the treeline (but including Northern Labrador), other than the Western Arctic. A seat is reserved on the Board of ITC for COPE, representing the Western Arctic.

[5] "From Ellesmere down to the islands in James Bay is the same as from James Bay to Mexico City. Projecting down from the western and eastern limits, we go from 600 miles west of Vancouver to 120 miles east of Halifax." *Air Transport 1970.* Northern Transportation Conference, p. 361.

The unique features of this area have been summarized by Peter Ittinuar M.P. in describing his own riding of Nunatsiaq:[6]

> The riding of Nunatsiaq is the expanse of cold Arctic land located north and east of the treeline. Geographically remote from Southern Canada, the communities in the Eastern Arctic are also remote from each other. Frobisher Bay, the largest centre, has a population of just under 2,700 people, while Grise Fiord is a community of less than 100 people. This isolated and dispersed nature of settlements in Nunatsiaq means that transportation is a key component in the lives of Northern people. Food, including fresh produce and dairy products, household supplies, mail, gas and home heating oil, in fact almost everything that people deal with in their day to day lives depends on transportation services.
>
> The size of Nunatsiaq, as well as its remoteness, are only two components which make this area so distinct. Nunavut (as it is sometimes called) is populated almost entirely by Inuit, therefore the cultural and heritage of the area and the people are unique. Geographical factors, such as being situated above the tree line, close to the sea, and in an area where winter spreads itself throughout most of the year, are closely linked to the culture of the people. However, the geographical reality which has captured the interest of Southern Canada is the wealth of minerals and fossil fuels to be found in Arctic lands and waters.[7]

1.2 Approach

Northern transport encounters difficulties whose scope is unlike anything known in southern Canada. On the other hand, it is *not* the intention of this paper to imply that *every* problem mentioned herein applies to *every* community and region. Some situations are peculiar to one region only; for example, the road from Asbestos Hill in Northern Quebec gives rise to questions which generally do not arise elsewhere. Similarly, certain problems which affect one scheduled air carrier do not necessarily affect the other eight scheduled carriers which serve Inuit communities. It is not the intention of this report, when negative conclusions are reached, to "tar everyone with the same brush." Instead, it is hoped that wherever a problem is discussed with respect to one transport operation, it will serve to *alert* others.

---

[6] Nunatsiaq riding covers the NWT north of the treeline. It thus covers most of the Inuit homeland in Canada, other that Northern Quebec and Labrador. Mr. Ittinuar is the first Inuit M.P. in the House of Commons.

[7] "Transportation is a Big Problem in Canada's Largest Riding." 1979.

On occasion, this discussion will necessarily repeat concerns which have been raised at other conferences or in other reports, but on which no satisfactory action has yet been taken. That repetition is not surprising, particularly when one considers that some proposals of the 1970 Northern Transportation Conference have still not been implemented a dozen years later.

Some government officials have privately admitted a serious temptation to dismiss such concerns as "old hat". That is not a satisfactory response. The fact that a grievance is long-standing makes it *more* deserving of attention, not less so.

It is equally unsatisfactory for decision-makers to respond (as they have sometimes done to ITC) that problems in northern transport are merely "symptoms" of some yet unspecified "disease", and that it is futile to address the symptoms without curing the "root causes" of the disease itself. That argument is frequently raised, for example, in the context of northern air costs. The unspoken conclusion, under that scenario, is that transport planners can only meditate upon these problems until such time as the Frobisher Bay market grows as large as Toronto.

It is unacceptable and illegal for government officials, regulatory officials and transport executives to abdicate their responsibility, for *any* reason, to provide the North with "an economic, efficient and adequate transportation system."[8] No one is saying that it is easy. This report indicates the willingness of Inuit organizations to alert government and industry to problems; but the Inuit cannot be expected to do the government's job for it. At some point in the very near future, the Inuit role in sorting out "root causes" will increase *when* the Inuit are allotted their rightful participation in the planning process and the decision-making process; but until such time, the ball is squarely in the government's court.

Granted, large investments *have* been made and numerous plans have been drafted; but implementation must be accelerated where those plans exist, and action must be launched where they do not. Inuit organizations are not yet in a position to describe the details of *implementation* of public policy objectives nor is that currently their responsibility. They are, however, entitled to outline the standards which fairness and the public interest demand.

1.3 *Inuit and National Policy*

The ancestral Inuit homeland in Canada (in Nunatsiaq, Northern Quebec and Labrador) is approximately sixty times the size of Nova Scotia. According to Louis St. Laurent, it was administered in a "continuing absence of mind."[9] Indeed, uncertainties were expressed in other countries over Canada's sovereignty;[10] in the offshore areas, those uncertainties persist.[11]

---

[8] *National Transportation Act*, R.S.C. 1970c N-17, p. 3.

[9] House of Commons, Dec. 8, 1953.

[10] A two-part series in *Nord North* magazine, in 1980, outlined the historical challenges to Canadian sovereignty.

Since the 1890's, the classic Canadian method of asserting sovereignty was to keep transportation *out* of the Arctic - unless authorized by Canadian permit. That policy could potentially have created problems in terms of international maritime law; however, those problems were significantly reduced when Canada developed an effective rationale for keeping transport out: that rationale was the protection of Inuit rights. In 1926, Canada established the Arctic Islands Game Preserve[12] which had the stated dual purpose of protecting Inuit hunting and of asserting sovereignty. No "corporations or newcomers" could *enter* the Arctic[13] without ministerial permission; and such permission would not be granted unless for a "purpose not incompatible with the interests of natives in such preserve."[14]

This protection of Inuit interests was decisive in the treaty with Norway in 1930, in which Norway relinquished not only sovereignty claims over 100,000 square miles of the central High Arctic, but also rights of entry (even for fishing vessels).[15] It is fair to say that the Canadian policy of asserting sovereignty by keeping transportation out was, during the seventy years of its existence, generally a success in its stated goal.

During the past two decades, the situation became less clear-cut. On paper, the protection of Inuit interest continued to figure prominently in some crucial government moves such as the passage of the Arctic Waters Pollution Prevention Act,[16] which specifies that the protection of Inuit interests is basic to the rationale of the Act.

---

[11] The U.S.A. has not acquiesced to Canadian sovereignty beyong the three mile limit in the Arctic Archipelago; indeed, it formally protested the territorial claims implicit in the *Arctic Waters Pollution Prevention Act*. Although Canada's position was acknowledged in the Law of the Sea Convention, the U.S.A. has not agreed to that Convention either.

[12] See "Impact of Inuit Rights on Arctic Water," by this writer. Sikumiut Workshop, McGill University, 1982.

[13] This appears to refer to entry by both land and sea.

[14] Section 6(b).

[15] See *Ibid*.

[16] "Parliament at the same time recognizes and is determined to fulfill its obligation to see that the natural resources of the Canadian arctic are developed and exploited and the arctic waters adjacent to the mainland and islands of the Canadian arctic are navigated *only* in a manner that takes cognizance of Canada's responsibility for the welfare of the Eskimo and other inhabitants of the Canadian arctic and the preservation of the peculiar ecological balance that now exists in the water, ice and land areas of the Canadian arctic." Emphasis added. Preamble to the Act, R.S.C. 1970, 1st Supplement c.2.

However, in ongoing practice the linkage between Inuit rights and sovereignty faded from government view.[17] Coincidentally, this was the period in which non-renewable resource companies began exerting major pressure for transportation systems, as witnessed by the voyage of the *Manhattan*. In response, government officials arrived at the opinion that the new key to asserting sovereignty was not to make things more difficult for the multinationals, but rather to make them easier: if northern transport relied, for example, on Canadian icebreakers, then foreign shipping countries would be arguably honour-bound to recognize Canadian sovereignty in the area.

There is no indication that this new approach is at all more successful than the previous one.[18] If anything, the Canadian position vis-à-vis the U.S.A. may have created new uncertainties:

> At present, the claim by shipping nations (notably the United States) that the Northwest Passage is an international strait is weakened by the fact that ice makes the passage almost unnavigable. By turning the area into a navigable waterway, rather than an ice-bound extension of land, Canada would be contributing to the argument of the shipping nations rather than undercutting it. In fact, Canada would be proving their point.[19]

That is not to say that transport in the North should be permanently arrested, or that Canada should necessarily return to the position taken during the time of the Arctic Islands Game Preserve. However, it does suggest a re-examination of priorities, as follows.

Although it is true that transport is a method of asserting sovereignty, it is not *as good* a method as the principle of giving full support to the local population: the optimal argument in support of sovereignty is that the area in question is the ancestral homeland of a population which is part and parcel of the national mainstream.[20]

If the local population is perceived and treated as part of the mainstream, then its homeland can (in international law) be perceived as the subject of an "historic title" by the country involved. An historic title is worth more, in terms of sovereignty, than any number of icebreakers, military exercises,[21] or other methods of "showing the flag."

---

[17] See, for example, the debate over abolition of the Arctic Islands Game Preserve in 1966, referred to *Ibid.*, p. 7.

[18] For example, there is no indication that the *Manhattan's* involuntary reliance on the Canadian icebreaker *Sir John A. MacDonald* affected the U.S. diplomatic position. On the contrary, the U.S.A. appeared to have ignored the icebreaking role altogether, as witnessed by its subsequent position on the Arctic Waters Pollution Prevention Act.

[19] "Impact of Inuit Rights on Arctic Waters," op. cit., p. 27.

[20] See "Aboriginal Rights and the Sovereignty of Countries," by this writer. World Assembly of First Nations, Regina 1982.

Therefore, if transport is to be used as an instrument of sovereignty, the logical first priority is to integrate the *population* to the national transportation grid. By the same token, it should be recognized that transport programs which are contrary to the interests of that population undercut the rationale of the Arctic Waters Pollution Prevention Act in particular and the sovereignty argument in general.

The issue is therefore not *whether* there is a national commitment to northern transportation, but *how* that commitment is expressed. As far as Canada's sovereignty and long-term interests are concerned, the objectives and priorities of a proper transportation system can be summarized in a single sentence: *people are more important than rocks.* This was alluded to in the 1973 *National Northern Objectives,*[22] but deserves to be continually re-emphasized.

> *Recommendation 1: The integration of Northern passengers and consumers to the national transportation grid should have higher priority than the construction of icebreakers, the dispatch of military exercises, and other sovereignty exercises. Planning and budgeting should reflect this priority.*

1.4 *Integration to the National Grid*

The National Transportation Policy[23] states:

> 1) a total transportation system for Canada, providing accessibility and equity of treatment for users is an essential instrument of support for the ahievement of national, economic and social objectives;
> 2) it is the responsibility of government to attend to the provision of an efficient total system for this purpose; and
> 3) achievement of this purpose requires the integration of services provided through the most appropriate modes for each specific service."

---

[21] Transport and sovereignty both figure prominently in Exercise Sovereign Viking, operated by the Department of National Defence. The exercise's stated purpose is to demonstrate "all-season mobile operational capability in the Canadian Arctic." No figures are available on cost. See press release of Feb. 24, 1981.

[22] See statement by the Hon. Jean Chrétien, May 1973.

[23] See statement by the Hon. Jean Marchand, June 1975.

To summarize: *accessible and equitable transportation is essential and it is the responsibility of government to provide it*, using whatever is the most appropriate mode(s).

The gigantic size of Canada has presented repeated problems in providing transport at a cost which was consistent with national policy. However, that was not a deterrent:

- In 1867, the Maritimes had awkward access to the central Canadian markets; accordingly, Canada undertook the monumental task of building the Intercolonial Railway. In 1927 and again in 1969, the federal government dramatically reorganized the pricing system along that route in order to restore the East to a transport cost level which would be consistent with the national norm;
- In the 1870's, cost-efficient connections with British Columbia were utterly impracticalbe. Although British Columbia had less than *a third* the number of voters that Inuit do, an even larger undertaking was launched -- the CPR.
- In the 1890's, the transport of grain from an equally underpopulated area (the prairies) was sufficient to institute another significant cost-reduction scheme, i.e. the Crow's Nest Pass Rates (*legislated* in s. 271 of the Railway Act).
- In 1949, the federal government took over (at considerable cost) infrastructure and debts in the transport field as part of its Terms of Union with Newfoundland.
- In the Past 115 years, Canada has used a variety of subsidy programs to deal with areas in which the proper infrastructure could not be established.

The conclusions are clear:

a) As mentioned earlier on the subject of sovereignty, the national interest has consistently insisted that in order for regions to be fully integrated to Canada, they must be part of the national transportation grid. That was true of the Maritimes, B.C., the prairies and Newfoundland.

b) In some cases, that meant a gigantic undertaking o infrastructure.

c) In other cases, it meant a subsidy system which would *simulate* a proper infrastructure.

Should a similar approach be applied to the North? That question has already been answered by the government. The integration of the North to the national transport grid is consistent, even essential,

> In principle, any transportation system consists of the infrastructure (i.e. the "way" and terminal facilities) and the vehicles. Vehicles are mobile and can be brought in as infrastructure is available. More highly developed infrastructure supports more sophisticated and efficient vehicles (i.e. lower unit cost of production eg. per tone mile). Infrastructure is capital intensive and fixed. Deficiencies in infrastructure "save" capital investment but this cost avoidance is in effect "cross-subsidized" by higher vehicle unit costs of production. That leads in traffic reduce the justification for improved infrastructure which would have allowed lower rates and stimulated traffic. This "Catch 22" situation is implicit in an under-developed transportation system such as exists in Canada's North.[26]

This underdevelopment of the system itself is due to the shortage of transport modes. Those modes can be summarized as follows:

> Hudson's Bay - a barge and single tug operated by NTCL from the railhead at Churchill up the west coast of Hudson Bay as far as Coral Harbour. (It is subsidized, $400,000 in 1982/83), to keep rates equal to those for resupply from Montreal; the purpose is to draw goods from Western Canada distributors.)
>
> Direct Sea - deep-sea vessels are chartered tc supply (from Montreal and Atlantic ports) the Eastern Arctic, Northern Quebec and Labrador
>
> The marine mode is the lowest rate mode of transportation but also provides the lowest level of service, particularly related to time. In the case of the Arctic, the frequency of service is annual. The total distribution cost for marine is only lowest for lower value bulk goods such as construction materials and fuels. The NTCL equipment can only be utilized for the short summer shipping season and then sits idle for the rest of the year.

Indeed, the marine mode (e.g. in relaying goods from the Churchill railhead) has so many indirect costs that in many cases, it loses its competitive edge on air transport. Nunasi Air, a subsidiary of Inuit Development Corporation, commissioned a study of the relative economics of DC-4 bulk charter operation (inter-modal with rail from Winnipeg to Churchill) to serve the Keewatin. High interest rates, high fuel costs (for heating warehousing) and greater consumer awareness of indirect costs are causing a shift from rail/marine service. A computer simulation model analysis[27] of this phenomenon plus evidence from the Canadian Federation of Arctic Cooperatives[28] and The Hudsons Bay Company, supported the contention that sealift could potentially lose a large enough market to competitive DC-4 service to make the latter fully viable. This is an interesting commentary on the utility of sealift.

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[26] *Ibid.* p. 10

[27] *Nunasi Air Economic Analysis*. R.S. Wallace Associates, May 1982.

[28] This idea has been under discussion ever since A.W. Loserich's "DC-4 Operation -- A Resumé". Canadian Arctic Cooperatives Federation, Yellowknife, 1974.

to established government policy: the *National Northern Objectives*[24] state the obligation to "provide for increased sensitivity in providing services and in meeting the needs of individuals to achieve a higher standard of living, quality of life, and equality of opportunity for northern residents and the encouragement of viable economic development with the Yukon and Northwest Territories".

These objectives are laudable but quite impossible to achieve given the disparity of services and costs between north and south for the essentials of development and indeed the basics of life. That disparity is described next.

PART 2 LEVEL OF SERVICE

2.1 *Introduction*

The prime factor which distinguishes the North from the rest of Canada's transportation grid is the lack of infrastructure. In the North, the transport system is "underdeveloped" in the sense that it does not offer a selection of transport modes (as found in a "developed" system).

It is the feature of the *system* which leads to a number of consequences for delivery and cost.

The consulting firm of R.S. Wallace Associates has summarized this characteristic as follows:[25]

> The Arctic transportation system includes the marine, land (contact with rail and road), and air modes. Infrastructure for all modes is rudimentary: gravel roads, few docking facilities, gravel air strips and limited navigation aids. Freight traffic is one-way northbound with little back haul-traffic. Services are based on hubs or gateways at Whitehorse, Yellowknife, Churchill (all in the sub-arctic) and Frobisher Bay with services to secondary hubs such as Inuvik, Cambridge Bay, and Rankin Inlet. Services then radiate in spokes to individual communities. Some of the effects of this network are high freight rates and difficult inter-community travel. In many ways, the northern transportation system can be characterized as under-developed, being similar in level of service to systems in other under-developed areas of the world such as the Amazon Basin and Central Africa.

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[24] *Op. cit.*

[25] This report was prepared by *Mr. F. Petrie* of that firm. The report is entitled A *Proposal for Subsidization of the Northern Transportation System*. August, 1982.

Land Modes

Northern rail service is in two areas. It is the only surface mode to the Churchill Gateway. It is a surface alternative to road for marine/rail inter-modal service to Whitehorse from Skagway, which is of little value to the Arctic.

The road system in the Yukon is also better developed than in the NWT.[29] These land surface modes, while higher cost than sea, are much cheaper than air and offer a reasonable level of service, generally year round. The variety which this provides will have significant consequences, as demonstrated later.

Air Mode

Air service is essential to all northern communities, from Labrador westward. Inuit communities are (with the sole exceptions of Inuvik and Tuktoyaktuk) beyond any land transportation.

Paradoxically, there are no less than nine unit toll carriers in this supposedly precarious market -- most of which make regular announcements to the effect that route protection and/or far increases are their only protection against bankruptcy.

The air mode is the most expensive form of transport but also offers the highest level of service. This can give it a lower total distribution cost for high value goods (high financing cost) or for perishables.

It is this paucity of transport modes which entitles the *system as a whole* to be viewed as "underdeveloped".[30]

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[29] The Yukon Territory has a relatively well developed road system. The initial stimulus was the 1942/43 construction of the Alaska Highway. Since then, the Northwest Highway System has been continually improved and extended, including completion of the Dempster Highway to Inuvik. While the road system is rudimentary by southern standards, its existence gives the Yukon a much better developed system than the Northwest Territories. The only roads in the NWT are the road to Yellowknife and the partially completed Mackenzie Highway.

[30] For a similar analysis, concentrating on the air mode, see J.L. Courtney, "Remote Air Services Defining Social Need", *Canadian Aeronautics & Space Journal*, May 1977, p. 166.

Finally, let there be no mistakes about the degree to which northerners are *aware* of the paucity of this system. Some observers argue that northerners are content with their level of service,[31] this view is inaccurate,[32] as the information in this paper (which was gathered from northerners) shall demonstrate. The words of MP (and pilot) Peter Ittinuar are representative: "The present level of service in the North leaves much to be desired."[33] This comment refers not to individual carriers, but to the *system as a whole*.

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[31] For example, there has been some misinterpretation of the "customer satisfaction" statistics in Transport Canada's *Air Passenger Travel in Northern Canada* (1980).

[32] Passenger surveys (re satisfaction) in the above report should be viewed with the following caveats:

a) It is not clear how many passengers declined to answer the surveys, either because of dissatisfaction or for linguistic reasons;

b) The surveys asked only about passengers' opinions of *that flight;* it is not clear whether the opinions given were representative of the passengers' other experiences with the airline (e.g. when the staff may not have been on its "best behaviour");

c) The surveys ask for a *comparison* of the flight with others; if the answer is a favourable comparison, it is not clear whether that indicates high-quality service relative to an acceptable standard, or whether it means mediocre service compared to normally dismal standards.

[33] "Transportation is a Big Problem," *op. cit.* Other observers have been less polite. For example, the CTC summarized the views of Mr. C. Schiller, the Baffin Superintendent of the NWT Department of Public Works, on the subject of Nordair in the following terms:

> "The northern air services by Nordair were poor, the service was poor, their Public relations record was poor, their cargo handling was poor, their counter to counter service was poor, (and the ash trays on their aircraft were always full.) Furthermore, he felt that Nordair raised their rates and fares at will and discriminated against northern people."
>
> "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," *op. cit.*, p.39 The CTC inquiry team in the Keewatin concluded that "unless senior management of Calm Air are prepared to 'bite the bullet' on the problem areas pointed out in this report, many of the concerns and possible misconceptions which have festered in the area over the last 6 to 8 months will probably continue." "An Inquiry into the Adequacy of Commercial Air Services To, From and Within the District of Keewatin," *op. cit.*, p.76.

2.2 *Air Facilities*

2.2.1 *Airstrips and Equipment*

There is no doubt that considerable improvements have been made to air facilities over the past decade, and that there is a governmental commitment to continuing the process. In 1980, DIAND's Advisory Committee on Northern Development predicted that "within the next five years, (1980-1985), most NWT communities with populations over 100 will have an improved runway, air terminal building, navigational aids, air-ground radios, weather instruments and equipment or airport maintenance."[34]

Nonetheless, difficulties with airstrips and equipment still exist at a number of levels.

The most extreme case in when there is no airstrip at all. That is the situation, for example, in Hopedale, Rigolet and Postville, in Labrador. There are plans galore; but one cannot land on a plan.

This is in direct contradiction to the policy objective laid down at the Northern Transportation Conference twelve years ago.[35] Furthermore, the Commission on Inquiry into Newfoundland Transportation recommended airstrips in all major communities in 1978;[36] again in 1980, the Labrador Area Master Plan called for airports in the three communities; [37] yet despite these calls and those of the local citizenry, no airstrip has yet been built.

The perennial response, whenever the subject of airstrips is raised, is " whether the market justifies it". For example, does it make sense to install a runway for DC-4's when only a handful of such aircraft could be expected in a year, and where twin-otter service meets most of the demand?

The answer is only *partly* based on the *economics* derived from larger aircraft. There are two even more important reasons: a) the *principle* of integrating the North to the developed Canadian transport system, and b) the improved *safety* associated with better strips (and hence more reliable sevice and medivacs). No price tag can be put on these features.

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[34] *1979-1980 Government Activities in the North*, Advisory Committee on Northern Development, Ottawa, 1980, p.171.

[35] "Areal need in each settlement is for strip which handle the largest aircraft that traffic to the community can reasonably justify." *Air Transport 1970, op. cit.*, p. 362.

[36] *Report of the Commission of Inquiry into Newfoundland Transportation*, Vol. I July 1978, p. 216.

[37] See *Labrador Area Master Plan - Update No. 1*, Transport Canada Air Atlantic Region, Civil Aviation Branch, April 1980.

Almost as serious is the case where the facilities are weak. There are also economic consequences: inadequacy of landing facilities creates constraints upon aircraft, which in turn affects price. Smaller aircraft usually have a higher per unit cost, as do large aircraft which must fly partly empty because of weight restrictions on certain airstrips.

This situation was summarized at the Northern Transportation Conference in 1970:

> Ton-mile costs for air freight are of course, extremely sensitive to aircraft size. When shipping goods more than 300 miles by Twin Otter because nothing larger can land at the destination -- and this is done -- anything that comes off that aircraft is going to be a high cost item. The effect on the cost of living is obvious . . . The costs are highest in the more remote settlements, where the people and the economy are least able to carry the extra burden.[38]

Nevertheless, and despite the passage of twelve years, the twin otter remains the "Workhorse" for many Inuit communities (e.g. in Labrador). That is not progress.

An interesting example of the economies involved was presented by the municipal government of Igloolik, which advanced the following figures in 1979:

> The proposed runway construction calls for 3000 feet; thus the Community of Igloolik will only be served with STOL De Havilland Twin Otter. This type of aircraft is extremely expensive to operate thereby effecting the price of essentials i.e. fresh vegetable, produce, milk etc. Within the last five months the average of 20,949.6 pounds per month of freight was brought in at .22¢ per pound from Hall Beach, 75 passengers per month at $43.00 one way. The distance between Hall Beach and Igloolik is 60 miles. The freight rate is extremely high because the capacity of the twin Otter holds only 3100 pounds at its peak. Furthermore, we were made aware that F227 aircraft can bring freight into Igloolik from Hall Beach at .10¢ per pound. But with a 3000 foot runway it would not be possible to bring in this type of aircraft.[39]

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[38] *Air Transport 1970*, *op. cit.*, p. 362.

[39] Report to Mr. Peter Ittinuar from the Municipality of Igloolik, July 16, 1979. Goolik now has improved facilities.

TABLE 1

Frequency of medical evacuations (Ungava Bay)

	1979	1980	TOTAL
Kangirsualujjuaq	129	94	223
Kuujjuaq	228	217	445
Tasiujak	36	44	80
Aupaluk	67	46	113
Kangirsuk	127	113	240
Kangirsujuak	77	93	180
Quaqtaq	56	52	108
TOTAL	720	659	

Source: Kativik Regional Government

However, the most dramatic consequence of the inadequacy of northern airstrips is in terms of *safety*. Short airstrips, and poor (or non-existent) navigational equipment are hazards to life and limb. This is not only reflected in the occasional crash of an airplane; these crashes attract publicity, but people often overlook the fact that poor facilities make landings difficult for medical evaluations on a *regular basis*. Crashes can kill people; but people can also be killed by a ruptured appendix while waiting for a *"medivac" that doesn't come* because a short strip and poor equipment have combined with poor weather to make the airstrip inaccessible.

In northern Labrador, there are no facilities for instrument flying, and all flying must be done by VFR (Visual Flying Rules).[40] In view of Labrador's reputation for fog, a capacity for instrument flying appears to be a logical first step in providing more reliable service.

The length and condition of airstrips is also a problem which has been recognized for some time.

In Labrador, the Commission of Inquiry into Newfoundland Transportation reported bluntly in 1978 that "the coastal (air) service has, if anything, deteriorated during the last ten years. Air service has changed very little. . . The service provided by Labrador Airways is, of necessity, irregular and inadequate due to the lack of suitable landing strips."[41]

The problems associated with this situation are numerous. For example, from time to time, Labrador Airways' seaplanes are caught in a freeze-up, and must be chipped free. That causes obvious delays. In the 1980's, this appears to be a curiously anachronistic way to foster the public interest in the field of transportation.

In Northern Quebec, the length and condition of local airstrips has been the ongoing subject of negotiations. The predicament of those airstrips is described in the accompanying table.

Two airstrips, at Kuujjuaq[42] and Kuujjuaraapik[43] can handle jet service. There is elsewhere a drop in the quality of facilities The eleven remaining airstrips in Northern Quebec do not meet minimum

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[40] The Labrador Inuit Association has called for navigational facilities which would at last permit instrument flying ("I.F.R.") for all communities of Northern Labrador. See Resolution No. 9, L.I.A. Annual General Meeting, Makkovik 1982.

[41] *Report of the Commission of Inquiry into Newfoundland Transportation*. St. John's, July 1978, p. 215.

[42] Previously called Fort Chimo.

[43] Previously called Great Whale River.

SUBJECT HEADINGS	MINISTRY OF TRANSPORTS (MOT) MINIMUM STANDARDS AND RESPOSIBILITIES (Arctic C)	(Arctic B)	KANGIRSUA-LUJJUAQ (George River) (C)	TASIUJAQ (Leaf Bay) (C)	AUPALUK (Hope's Advance Bay) (C)	KANGIRSUK (Payne Bay) (C)	QUAQTAQ (Koartac) (C)	KANGIQSUJUAQ (Wakeham Bay) (C)	SALLUIT (Sugluk) (B)	IVUJIVIK (C)	AKULIVIK (Cape Smith) (C)	POVUNGNITUK (B)	INUKJUAK (Port Harrison) (B)
Length of Strip (ft)	3,000	5,000	2,132.65	2,460.75	1,476.45	1,148.35	1,312.4	1,312.4	1,502.7 (partly used)	820.25	1,200.85	2,624 ft (not yet used)	2,[illegible]
Width of Strip (ft)	100	150	82.03	98.43	65.62	65.62	82.03	65.62	75.46	82.03	98.43	98.43	1[illegible]
Orientation	N/A		16-34	07-25	05.23	04-22	14-32	10-18	03-21	16-34	17-35	01-19	[illegible]
Approach and Navigation Aids:	-Non Directional Beacon (NDB); also VOR/DME shall be installed at strategical located airports or other locations where required to upgrade the navigational information along and/or airways and air routes. At locations where VOR/DME is installed it may, where practicable, be sited to serve as an approach aid also. All funded by MOT		none	none	none	NDB/MOT	NDB/MOT	none	none	none	none	none	NDB MOT
Passenger and Cargo facilities:	-Passenger-cargo shelter; airport access road; to be funded by MOT.		none	none	none	none	none	none	none	none	none	none	none
Aircraft facilities:	-Aircraft parking apron, aviation fuel storage and dispensing facilities, airport maintenance equipment, garages and servicing facilities, all funded by MOT.		none	none	none	none	Air Inuit fuel service	Air Inuit fuel service	none	Austin fuel service	Austin fuel service	Austin fuel service	Austin fuel servic
Communications: Equipment -	-Air-ground, and point-to-point communications: equipment to be funded, inspected and maintained by MOT;		Air Inuit HF radio	Air Inuit HF radio	Air Inuit VHF radio	Air Inuit HF radio	Air Inuit VHF radio	Air Inuit HF radio	Austin & Air Inuit HF radio	Telephone -	Telephone -	Austin VHF radio	VHF and H radio
Operators -	Operators training and monitoring by MOT.		Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent - Austin agent	Austin agent	Austin agent	Austin agent	MOT
Meteorological Information	-All meteorological facilities and equipment to be funded by MOT -operators must operate in accordance to MOT standards;		Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent	Air Inuit agent Austin agent	Austin agent	Austin agent	Austin agent	MOT
Maintenance Equipment - Personnel - Material -	-provide technical and training services to Regional Government for the operation and maintenance of airports to MOT standards. -MOT to fund the maintenance and operation of all air transportation facilities.		suitable suitable suff.	suitable suitable suff.	unsuff. unsuff. suff.	unsuff. unsuff. suff.	suitable suitable rare	suitable suitable suff.	suitable suitable suff.	suitable suitable suff.	poor poor rare	suitable suitable suff.	suitable suitable suff
Lighting	-Runway and approach lighting, visual approach slope indicators, threshold identification ligh- singly or in combination as will meet the operational requirement, rotating beacon, lighted wind socks, to be provided and funded by MOT.		by snow-mobiles only	by snow-mobiles or Air Inuit flare pots	by snow-mobiles only	by snow-mobiles only	flare pots lighting by Air Inuit	by snow-mobiles only	by snow-mobiles only	by snow-mobiles or Austin flare pots	by snow-mobiles or Austin flare pots	partly operated light supply by Austin	MOT lighting
Distance to Community (km)	N/A		.3	.7	.1	1.7	.3	.5	2	.5	.1	2.7 of bad road	.1
General State of Strip	N/A		Dangerous slight re-orientation would solve many problems	Relatively good. Large bump spoils 650 ft off strip at ve[illegible]asy to upgrade.	Very soft. Needs up-grading	Bad condition, bad location Needs re-orienta[illegible]n & grading	Pitiful. Has been slightly improved. Needs fil-[illegible]ng, [illegible]ting &	Soft strip Needs re-orientation, would then meet requ[illegible]ments.	There are 3 strips, all bad at present. Abo[illegible] only [illegible] worth im-	Fair but bad location, too short & [illegible] Needs replacement.	Bad. Needs replacement.	Small 1000 ft strip nearly [illegible] in use, but too [illegible] in bad [illegible] and hard to [illegible]	soft and sandy. Needs re-location

safety standard: technically, all landings there are illegal.[44]

In case anyone should forget this, the wrecked airplane at the end of Povungnituk's 900-foot strip serves as a reminder.

Makivik Corporation is currently negotiating improvements; but the process of negotiating with both Ottawa and Quebec city is incredibly onerous. According to some observers, a desirable standard would be:

- gravel runway 3500 x 100
- apron and taxiway
- runway lighting
- approach lights
- navigational aids (NDB, VASIS, RIL, Rotative Beacon, Lighted Windsock)
- electrical power
- access road
- meteorological equipment and services
- communications equipment
- small terminal building
- maintenance garage and equipment
- miscellaneous items on a site basis

In the Northwest Territories, the situation in some locations causes difficulties. In some communities such as Lake Harbour, conditions are severe: incoming planes must avoid the fuel tank, then land on a 1500 foot strip uphill without crashing into the hill beyond. In other communities such as Baker Lake, the condition of the strip will not permit large planes to land fully-loaded. Furthermore, large deep puddles can form on the strip, which have a serious braking effect on aircraft taking off.

An indication of the seriousness of this problem occured on September 16, 1982, when the Dept. of National Defense's preliminary report on the crash of a Chinook helicopter at Rankin Inlet suggested the crash was caused by "over crowding and *poor facilities*". Rankin Inlet was considered one of the *best airstrips in the Arctic*.

In the Baffin Region, the report to the CTC recommended that "the landing strips at these communities should be lengthened so that in time larger aircraft could be used."[45] That recommendation, however, does not appear to have had any incremental effect on government policies.

Correction of such problems is slow. For example, the predicted freight volumes and passengers for Baffin Island communities will, in time, burden HS748 aircraft; thus the Air Transport Committee recommended in their 1981 report on commercial air service in the region, that the landing strips in these communities be lengthened to accommodate larger aircraft.[46] As of this date, however, no lengthening work has been done in response to this recommendation, although early action is still hoped for.

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[44] "The pilot who lands his plane on such airstrip does it at the passenger's risk and illegally." *Current Situation of Airstrips North of the 55th Parallel*, Kativik Regional Government, April 1981.

[45] Recommendation 9.6 of "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., p. 79.

Another case in point is that of Grise Fiord. As in the case of Lake Harbour, no one can deny that the terrain is hardly ideal. However, the problem is not insurmountable. Indeed, at the 1970 Norhtern Transportation Conference, it had been recommended that a new strip be built "*with an approach angle less directly into the cliff*" (*p. 368*).

Twelve years later, the approach angle is still into the cliff.

> *Recommendation 2 : The Recommendation of the 1970 Northern Transportation Conference should finally be implemented by providing every Arctic municipality (including Northern Labrador) with an airstrip.*
>
> *Recommendation 3 : The airstrip should have facilities up to a standard consistent with that proposed for Northern Quebec, i.e. gravel runway 3500 x 100, apron and taxiway, runway lighting, approach lights, navigational aids (NDB, VASIS, RIL, Rotative Beacon, Lighted Windsock), electrical power, access road, meteorological equipment and services, communications equipment, small terminal building, maintenance garage and equipment.*
>
> *Recommendation 4 : The development of these facilities should begin immediately.*

2.2.2 *Ice Strips*

Many communities make airstrips on ice during the winter to compensate for the inadequacy of their existing strips. However, this is an unsatisfactory substitute for an adequate land-based airstrip.

For example, it is possible to lose valuable equipment through the ice.

At Povungnituk, a $130,000 bulldozer had to be fished out of Hudson Bay after going through the ice on the ice strip. At Aupaluk, a $140,000 loader was similarly fished out of Ungava Bay.[47] Canso aircraft are also to be found in Hudson Bay at Povungnituk and Great Whale River.

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[46] "An Investigation into the Complaints about Commercial Air Service to the Baffin Island Communities," Ibid., pp. 76 and 80.

[47] "Current Situation of Airstrips North of the 55th Parallel," op. cit., p. 5.

There are further problems with ice strips:

> These airstrips on ice can also be far from the villages and not so easily accessible for the passengers, especially during the coldest months. They represent also some problems for the pilots and planes. Because they are located in areas where the tides cannot affect the stability of the ice access to facilities or services such as fuel supply can be complicated.[48]
>
> *Recommendation 5 : Ice strips can be considered only an interim measure, and not a substitute for a proper airstrip.*

2.2.3 *Terminal Facilities*

Most airstrips in Northern Quebec, Labrador and other regions have either poor terminal facilities or none at all.

Except in Nain and Makkovik, there are no waiting facilities at airstrips on the Northern Labrador Coast. Passengers often have to walk or travel by snowmobile over snowbanks and boulders to reach the planes, a hardship the elderly and the patients being flown out for medical treatment should not have to endure.[49]

The situation is similar in most Inuit communities in the NWT, for example at Baker Lake. No passenger cargo shelter is scheduled to be built there until 1985-86.[50]

None of the Class C air strips in Northern Quebec have passenger cargo shelters or airport access roads.[51]

> *Recommendation 6 : As proposed in Northern Quebec, every municipality with an airstrip should have a small terminal building, with shelter for passengers and equipment.*

2.3 *Service*

2.3.1 *Frequency and Reliability*

Air service to Inuit communities is often irregular. Many Inuit communities, such as Nain and others in Labrador and in the NWT, are not serviced by air carriers with Class 2 licenses, meaning that the carrier is not required to provide a written statement of the frequency and time of departure and arrival of flights.

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[48] *Ibid.*

[49] "Supporting Brief to the Canadian Transport Commission," Labrador Inuit Association, Oct. 14, 1981.

[50] "Nunatsiaq Report no. 2," Peter Ittinuar.

[51] "Current Situation of Airstrips North of the 55th Parallel," Op. cit., p.3.

Instead, current practices leave many communities in the dark, up until the last conceivable moment, as to the carrier's intentions. In Labrador, for example, it is not unheard of for people to await flights for almost three weeks because of "weather", difficulties in booking, or a combination of these factors.

This feature is usually blamed by airlines on weather. However, when a medical or other emergency arises, it is cold comfort to be told that no flight is available because of "circumstances beyond the airline's control".

In one noteworthy instance, Labrador Inuit could not arrange for a very serious medical evacuation, presumably because of weather. NATO forces were on exercises in Labrador at the time; accordingly, arrangements were made with the Luftwaffe forces who were present, and the Luftwaffe graciously handled the medical evacuation of the Inuit patient from Labrador.[52]

This is not to criticize the airlines; on the contrary, many "medivacs" are carried out in heroic conditions. However, this "heroism" would not be necessary on such a regular basis if infrastructure (airstrips and navigational backup) were not so "challenging".

Nevertheless, some airlines at least *appear* to respond better than others. It is a sign of the "PR" problems amoung some airlines that Labrador Inuit Association was informed that Labrador Airways condemned the Luftwaffe for depriving the airline of a paying passenger.

Unfortunately, there is no requirement that an airline (or authorities) publish any record of the number of times that it has arrived on schedule, behind schedule, or failed to land at all. The extra effort to do so would be minimal: airlines file *daily dispatch records*. It would simply involve a *consolidation* of those records, including *categorized explanations of delays and non-appearances*. It is probable that standard forms could be used which would minimize paper burden for the carrier; if not, the consolidation could be handled by CTC computer, with the possibility of more in-depth studies upon request.

An equally precarious situation arises when an airline has a minimal number of planes. This is the situation of many northern carriers, which are often undercapitalized and must operate with no "slack" in their system. Under such circumstances there may be no aircraft to replace one which "goes mechanical" (i.e. which goes in for repairs).

Indeed, in regions such as Labrador, it is not unusual for communities to be advised that flights have been cancelled altogether because of mechanical difficulties.

The vulnerability of communities is underlined by the case of Coral Harbour, which loses two to three planeloads of meat each summer to spoilage. This supply of frozen southern meats has to be destroyed. Shippers, carriers and intervening cartage companies can all blame each other (or "circumstances beyond their control") as much as they wish; but that is cold comfort to the community in question. There is no substitute for reliable service.

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[52] See *Kinatuinamot Ilengajuk*, Nain, Labrador. June 12, 1981. For the resulting controversy with Labrador Airways, see St. John's *Daily News*, June 11, 1981.

Recommendation 7 : A maximum of navigational devices should be available in the North to counteract the weather problem.

Recommendation 8 : The Canadian Transport Commission should arrange that figures on the frequency and timing of landings be part of the public record, and are relevant to all applications for licences and fare increases.

Recommendation 9 : The CTC, in considering all applications for licences, should consider the back-up capacity of an airline.

2.3.2 Routing

Air service between Inuit communities is often indirect. This is the result of historical rigidities in CTC routings, which have never been the object of any systematic analysis. Accordingly, one must allow long periods for travel time and pay unnecessarily high prices if one wishes to travel between certain points. In effect, air travel between such points is practical only by charter.

For example if one, wishes to travel from Kuujjuak, Quebec to Nain, Labrador, less than 333 miles away, one must travel first to Montreal, Labrador City, Churchill Falls and Goose Bay - for a total distance of nearly 2,000 miles.

Another problem with routing is the usual necessity of layovers.[53] For example, a trip across Hudson Bay from Sanikiluaq to Coral Harbour will usually take five days because of difficulties in connections.

The above speaks for itself. Aside from the frustration and loss of time caused by such problems, the monetary cost to the passenger is also very high because of high northern accommodation costs.

The routing problem is also seen in the question of transhipment: the goods destined for one community are often transhipped via another community causing losses due to damage and theft.

The problem in Labrador has recently been reduced because CN Marine has agreed to send shipments directly to Northern Communities rather than transhipping via Goose Bay. The problem still exists in other regions.

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[53] This conclusion is also reached in *Air Passenger Travel in Northern Canada* (op. cit.) pp. 20-21.

The question of routing also dramatizes the slow response time of government and industry. For example, calls were made at the Northern Transportation Conference in 1970 for an east-west arctic air link; however, it took a full decade for this proposal to be implemented.

> *Recommendation 10 : The Northern Air Transport Association should sponsor efforts to assure that all airlines have integrated schedules so as to minimize layovers.*

> *Recommendation 11 : The CTC should favour licence applications in which airlines propose routes which open the possibility of trans-Arctic travel, and should review this situation periodically.*

2.3.3 *Reservations*

Some of the Air carriers in the North have poor reservation systems which leads to unnecessary delays and layovers for passengers from time to time.

For example, the First Air reservation system had come into criticism for not being computerized; Park Wardens at Auyuittuq National Park would make their reservations by calling Nordair in Montreal and then inform the First Air agent in Pangnirtung. Such criticism today would be off target, since Nordair and First Air are hooked into the Reservac system via teletype and telex. However, approximately half the northern carriers have no such facilities yet. Furthermore, this is still not as effective as having a dedicated satellite channel, which the CTC report recommended in 1981; northern carriers, who would be hard-pressed to afford such a system without government support, have urged government assistance in implementing this recommendation -so far without success.

A comparable situation exists in the Kitikmeot Region, where only Cambridge Bay is equipped with Telex. Calm Air passengers in the Keewatin must call long distance to either Rankin Inlet or Churchill if they want to reserve seats. Labrador Airways passengers must similarly deal with Goose Bay. Even so, at times confirmed reservations are not put through. In Keewatin, information on seat availability on other airlines is non-existent.[56] This was among the subjects which the report to the CTC considered a "problem area" which had to be dealt with by carrier "if it wishes to be accepted by the people and the businessmen" of the area.[57]

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54. "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., pp. 31 and 77.

55. Recommendation 9.8. See *Ibid.*, p. 79.

56. "An Inquiry into the Inadequacy of Commercial Air Service To, From and Within the District of Keewatin,". Ibid., pp. 39-42.

57. *Ibid.*, p. 75.

> *Recommendation 12: The proposal to use high technology (or other means) to permit reservation and seat arrangements from all municipalities should be implemented.*

2.3.4 *Luggage*

There is repeated discrimination against northerners in the treatment of luggage.

For example, Nordair allows passengers flying between its points in southern Canada,(for example Montreal and Toronto), to take three pieces of luggage, of specified dimensions but of unspecified weight, free of charge.

Flying south to Florida, Nordair charter passengers are allowed 66 pounds free of charge. However, if one flies north from Montreal on the same airline one must pay extra for anything above 44 pounds of luggage.[58] This is in comparison to Air Canada's limit of 70 pounds per piece of luggage, of which two can be checked.

Location of luggage is another concern . According to complaints made to the inquiry team, Calm Air's baggage handling system is unorganized: baggage is mixed with freight, is not segregated by destination, and is often not tagged for destination.[59]

Accordingly, it is hardly unheard of for luggage to be shipped to the wrong community, or to require one and a half hours to be deplaned.[60]

> *Recommendation 13 : Limits on Northern baggage should be no more stringent than on southern flights.*

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[58] The above information is available from the Nordair District Sales Office, Ottawa. Mr. Pearson of Frobisher Bay, owner of two local businesses, mentioned to the Air Transport Committee that Nordair assessed excess baggage charges on all excess baggage bound north but did not exercise the same zeal on their other flights. See "An Investigation into the Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., p. 37. A similar complaint was made by Charles Ruttan, President of Local X008 of the NWT Public Services Association in Frobisher Bay.

[59] "An Inquiry into the Adequacy of Commercial Air Services To, From and Within the District of Keewatin," op. cit., p. 44.

[60] For example, the location of the cargo door on a Calm Air HS748 does not permit the use of a forklift truck, and makes the use of other trucks awkward. See *Ibid.*, p. 70.

Recommendation 14: Luggage should be tagged and segregated for easy deplaning.

Recommendation 15: Northern aircraft should have easy luggage handling capacity.

2.3.5 *Cargo*

The delivery of cargo within a reasonable time frame is often a major concern.

For example, when snowmobile parts are ordered through First Air/Nordair, it sometimes takes a month for them to arrive at a place like Clyde River.[61] Similarly, The Air Transport Committee received complaints that First Air's HS748 aircraft is so full that it delays freight. In 1980 the Co-op at Pond Inlet ordered 15 ski-doos by air which took three to four weeks for delivery.[62] In each case, First Air indicated circumstances showing that it was not at fault; however, even if the carrier is blameless, the situation suggests at least that there are problems in infrastructure.

When construction workers or machine maintenance people fly Calm Air to their work site, Calm Air often does not guarantee that the worker's tools would be carried on the same aircraft.[63] The results are obvious.

The case of Coral Harbour was mentioned earlier. According to the Bay manager, two or three spoiled shipments of food per year is common among Arctic communities, although this figure appears high to other observers.

There is some awkwardness (predictably) when the recipient is *billed* by the airline when food was spoiled. This was a complaint, for example, with First Air/ Nordair service.[64]

A further problem occurs when delays are reported. The experience of the Municipality of Pangnirtung is a case in point: it reported that on orders for replacement parts on municipal equipment, "it is nearly always necessary to personally follow-up by long distance phone calls to the supplier, to Nordair at Montreal, to First Air in Frobisher." It is not uncommon for this to "result in a parts bill for $25 and phone bills totalling $150."[65] Again, the problem may be more attributable to the suppliers than carriers; but frustration with the entire *system* persists.

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61. "An investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., p.25.

62. Op. cit., p. 28.

63. "An Inquiry into the Adequacy of Commercial Air Service To, From and Within the District of Keewatin," op. cit., p. 44.

64. "An investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., p. 25. In practice, the airline usually bills the client, and then awaits a "claim" by the customer as a set-off, based on the client's written comments on the waybill. At best, this approach os tedious; at worst, it causes resentment when the "claim" procedure is slow.

65. *Ibid.*, p. 32. Nordair has come into particular criticism concerning delays in settlement of claims for lost cargo.

Problems also occur when the cargo reaches its intended community. For example, the nurses at Clyde River reported that the First Air agent at Clyde River does not always inform them of the arrival of parcels. Sometimes they are sent to the Hudson's Bay Store or the Post Office, in which case they may have trouble locating them. This kind of delay is critical with certain medical supplies (e.g. blood samples) which should be kept refrigerated,[66] although it is not clear whether this problem is widespread or purely isolated.

Finally, there are problems with billing for freight. Airlines such as Nordair did not accept credit cards,[67] nor would they handle food on a collect basis;[68] the report to the Canadian Transport Comission recommended that this be changed.[69] This situation has improved, but COD deliveries are still awkward for anyone who has not previously arranged an account with the airline.

> *Recommendation 16 : Air carriers must place a much higher priority on timely shipment of northern cargo.*
>
> *Recommendation 17 : Workers and their equipment should be delivered together.*
>
> *Recommendation 18 : Customers should not be billed for cargo rendered unusable by delays.*
>
> *Recommendation 19 : Air carriers should place higher priority on responding and transmitting enquiries from northern customers re delayed goods.*
>
> *Recommendation 20 : Recipients of cargo should be notified on arrival.*
>
> *Recommendation 21 : Credit cards and cheques should be acceptable throughout the North.*

2.3.6 Access

In most cases of northern aircraft, access to the aircraft is almost impossible for the disabled or the elderly.[70]

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[66] "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," op. cit., p. 26.

[67] *Ibid.*, p. 32. In the case of Labrador Airways, credit cards are accepted in Goose Bay, but not in the Inuit communities in the North.

[68] *Ibid.*, p. 34.

[69] Recommendation 9.7. See *Ibid.*, p. 79.

[70] This issue was raised by Mr. William Noah, Member of the Legislative Assembly for Keewatin North, at the Inquiry into Commercial Air Service in the Keewatin.

Recommendation 22 : Northern airstrips should be provided with equipment to assist boarding and deplaning by the disabled and elderly.

2.3.7 *In-Flight Service*

Concerns with in-flight services can be divided into five categories: safety, meals, washrooms, cleanliness and language.

In terms of safety, one major Inuit concern is that safety announcements (including emergency procedures) are almost never made in the language of the overwhelming majority of Arctic residents, i.e. Inuktitut. For that matter, some carriers such as Labrador Airways usually make no announcement whatever.

Some carriers such as Nordair have introduced a system of *recorded* safety announcements in Inuktitut, where cabin personnel does not know the language. However, this practice is not widespread. Carriers who fail to notify their Inuktitut-speaking passengers of safety precautions are in violation of the spirit, if not the letter, of the government regulations demanding that passengers receive "information respecting the emergency equipment and exits on that aeroplane."[71] In view of the cost of maintaining good quality announcements, this may be an area where collective action is preferable.

On the subject of meals, a number of Northern carriers do not provide meals on flights which are over meal time.[72]

Another concern is the subject of *what* is served. Many communities are not enchanted with the serving of alcohol on flights; so when First Air asked for the support of the Baffin Regional Council in its application to serve alcohol on flights, the BRC countered with a proposal to serve country food instead.[73] That proposal was tried and discontinued; however, some observers feel that it deserved better promotion.

Washrooms are another issue. In Labrador, passengers are not provided with washroom facilities on board airplanes. In other regions the aisles to the comfort station are often blocked by freight and luggage. As pointed out by Kitikmeot Inuit Association, this is not only an inconvenience; it is a safety hazard, since aisles also lead to the emergency exits.

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[71] See e.g. s. 19(3) of the "Air Carriers Using Small Airplanes Order."

[72] "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," ibid., p. 76; and "An Inquiry into The Adequacy of Commercial Air Services To, From and Within the District of Keewatin," ibid., p. 44.

[73] See proceedings of the Spring 1981 meeting of the Baffin Regional Council at Igloolik.

A further issue is cleanliness. For example, a routine check of seats during stops is often overlooked, and the first view by incoming passengers may be a full air sickness bag.[74]

Finally, most Northern air carriers do not have cabin attendants who have a working knowledge of Inuktitut. Thus older people from the small communities cannot be instructed in safety measures and emergency procedures in the only language they understand; nor can they communicate about any of the in-cabin services mentioned above.[75] Again, this is in violation of at least the spirit of federal regulations, which specify that cabin attendants must have "the means of communication . . . and briefing of passengers." [76]

> *Recommendation 23 : Announcements concerning safety measures in aircraft should be made (in person or by tape) in English and Inuktitut.*
>
> *Recommendation 24 : Wherever flight time permits meals should be served at meal time.*
>
> *Recommendation 25 : Country food should be available upon request, and should in any event take priority over alcohol.*
>
> *Recommendation 26 : Aisles, access to washrooms and access to emergency exists should be left unimpeded.*
>
> *Recommendation 27 : Higher priority should be given to cleanliness on northern flights.*
>
> *Recommendation 28 : Higher priority should be given to training of Inuktituk-speaking cabin attendants.*

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74. ITC has received comments of this nature concerning Calm Air flights from Baker Lake.

75. "An Inquiry into the Adequacy of Air Service To, From and Within the Keewatin," p. 43.

76. E.G. "Air Carriers Using Small Airplanes Order," s.47(1)(e); "Air Carriers Using Large Aeroplanes Order," s.50(1)(c)

2.4 Sealift

2.4.1 Cost

Ore shipments on the *MV Arctic* from Nanisivik have their deficits picked up by the federal government.[77] Shipments for people in the Arctic also receive subsidies in some places;[78] but that subsidy is inadequate to keep costs within reasonable levels.

The most notable example is in housing. For example, about $21,000 of the cost of building a triplex in Frobisher Bay is for transportation; that means that materials and construction account for only 85% of the cost.

Similarly, the actual building material costs for a four bedroom house in Inuvik add up to over $120,000. Transportation of the materials however, adds $18,380 to the price, bringing the total cost close to $140,000.

> *Recommendation 29 Sealift to people deserves a comparable subsidy to sealift of rocks, and subsidy levels should be increased accordingly.*

2.4.2 Facilities

Facilities include both ships and docks. In Labrador, marine service has the function of both sealift and ferry service (CN Marine).

Concerns have been expressed about the adequacy of ships. For example, reports had circulated in Labrador about the possible replacement of the ship *Bonavista* by the *Hopedale*, which is half its size. From the standpoint of the communities served, this would have been an unacceptable downgrading in service,[79] and appeared to repeat mistakes which had been made elsewhere in Labrador.[80] However, CN Marine has issued assurances that any such replacement is *temporary* (for mechanical reasons); the only problem therefore appears to be one of *communicating* those good intentions to the communities.

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[77] In the last three years, Canadian taxpayers have covered almost $15 million in deficits, shipping unrefined ore to Antwerp. Costs for this assertion of Canadian know-how include its "inclusive routine maintenance" in Kiel, West Germany, the "Biennial Underwater Hull Survey" in Hamburg, and its "annual refit" in Amsterdam. See *Canarctic Shipping Co. Ltd. Annual Report*, 1979, 1980, 1981.

[78] For example, the Water Transportation Assistance Directorate provides a half million dollar subsidy to the Keewatin sealift. See *1979-1980 Government Activities in the North (op. cit)*.

[79] The Labrador Inuit Association has called for the retention of service by a 200 foot vessel; see Resolution No. 9 of the L.I.A. Annual General Meeting, Makkovik, March 1982.

[80] Elsewhere in Labrador, there was a downgrading of service after the 1977 sinking of the *William Carson*. This was criticized by the *Report of the Commission of Inquiry into Newfoundland Transportation*, (Vol. 1. St. John's, July 1978, p.215).

The inadequacy of docking facilities contributes to loss and damage. Loss and damage in shipment, storage and handling, and high insurance rates (which reflect the frequency of such events), are in turn added to the already high prices of goods in the North.

Most communities (including Frobisher Bay, a major centre in the Eastern Arctic), lack adequate docking facilities for Sealift; thus there are high losses due to damage during offloading. At Kangirsualujjuak (George River), a truck was dumped into Ungava Bay. At Kuujjuak, not only was a truck dumped into the bay; but *even the derek toppled into the bay* (thereby making further unloading impossible).

Similarly, some locations such as Spence Bay have no adequate stacking area. Crates are placed at a slant, and in the rush to unload, tipovers and damage are almost inevitable.

> *Recommendation 30 : Sealift along the Labrador Coast should be maintained at a level no lower than at present.*

> *Recommendation 31 : Higher priority must be given to adequate docking facilities and stacking areas.*

2.4.3 Shipping Practices

Certain shipping practices lead to unfortunate consequences. For example, many foodstuffs are transported to Labrador communities by coastal passenger service rather than freight service. Special shipping containers are not used on the passenger service and goods are therefore placed directly into the ship's hold. Losses and damages, especially for perishables, are consequently high.

> *Recommendation 32 : Foods, particularly perishables, should not be placed directly in ships' holds.*

2.4.4 Flexibility of Routing

There are times during the year when there is a particularly high local demand for transport to locations which would be less frequented at other times of the year. Shipping schedules should make allowance for this local demand.

For example, Labrador vessels should include a trip north to Hebron and points between at the beginning of the fishing season in July and at the end of the season at the beginning of September, in order to allow for special local demand at those specific times.[81] CN Marine has, fortunately, indicated a co-operative attitude in this respect.

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[81] See Labrador Inuit Association Transportation Policy. See also Resolution No. 9, L.I.A. Annual General Meeting, Makkovik, March 1982.

Recommendation 33: Passenger ships (e.g. in Labrador) should provide certain trips in response to community demand.

2.4.5 *Timing*

The timing of shipments is understandably crucial because of the short season for sealift. This can create extreme awkwardness: for example, construction materials often arrive too late for construction to be completed in the short building season. This is an example of the desirability of better coordination.

Another example of the need for coordination is in ordering. The March 31st fiscal year-end for government and other major institutions occasionally causes extreme awkwardness, for the following reason.

In the North, many purchasers of bulky items (e.g. municipal equipment, housing, etc.) who rely (at least in part) upon governments for their budget do not receive their budgetary allocation until late Spring.[82] That provides them with remarkably little time to finalize purchases and to order in time for sealift.

Recommendation 34 : Budgetary allocations for northern projects should be made by February, in order to permit sufficient lead-time for sealift ordering.

PART III COST

3.1 *Introduction*

Mnay of the foregoing problems are directly associated with the *underdevelopment* of the system. The most direct consequence of these features is seen in the *cost of transport.*

3.2 *Some Costs*

3.2.1 *A Comparison of Passenger Costs*

The following chart gives a description of Northern passenger costs. It indicates, without equivocation, that Northern rates are consistently higher than those in the south.

These figures speak for themselves.

This data suggests that a large part of northern transport costs could be reduced if facilities were improved, e.g. to permit larger planes. However, this is *not the only problem;* because even when jet service is introduced, it is *still* more expensive than its northern costs result from a *multiplicity* of factors.

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[82] This concern has been an issue, for some time, at Inuit Non-Profit Housing Corp.

TABLE 2

COMPARISON OF INTRA-ARCTIC ECONOMY AIR FARES AS AT 01 SEPTEMBER 1982

CARRIER/ROUTE SECTOR	ONE-WAY FARE IN CDN. $	ROUTE MILEAGE	COST PER SEAT MILE $
FIRST AIR			
Frobisher Bay - Pangnirtung	119.00	187	0.64
" " - Broughton Island	168.00	304	0.55
" " - Clyde River	249.00	483	0.52
" " - Pond Inlet	322.00	683	0.47
" " - Cape Dorset	145.00	246	0.59
" " - Coral Harbour	229.00	454	0.50
Nanisivik - Pond Inlet	98.00	137	0.72
Pangnirtung - Pond Inlet	285.00	631	0.45
Broughton Island - Pond Inlet	240.00	510	0.47
Frobisher Bay - Lake Harbour	73.00	75	0.97
KEN BOREK AIR			
Resolute Bay - Pond Inlet	270.00	360	0.75
" " - Nanisivik	186.00	235	0.79
" " - Griese Fjord	180.00	241	0.75
Nanisivik - Pond Inlet	85.00	137	0.62
NORTHWEST TERRITORIAL AIRWAYS			
Cambridge Bay - Gjoa Haven	261.00	238	1.10
" " - Pelly Bay	431.00	382	1.13
" " - Spence Bay	351.00	290	1.21
Yellowknife - Frobisher Bay	635.00	1,420	0.45
" - Rankin Inlet	347.00	711	0.49
Rankin Inlet - Frobisher Bay	378.00	680	0.56
Yellowknife - Cambridge Bay	198.00	524	0.38(1)
Cambridge Bay - Coppermine	199.00	276	0.72
Holman Island - Coppermine	157.00	214	0.73

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(1) This route priced to be competitive with Pacific Western Airlines

CARRIER/ROUTE SECTOR	ONE-WAY FARE IN CDN. $	ROUTE MILEAGE	COST PER SEAT MILE $
CALM AIR			
Rankin Inlet - Coral Harbour	198.00	297	0.67
" " - Baker Lake	145.00	165	0.88
" " - Repulse Bay	207.00	315	0.66
Churchill - Rankin Inlet	205.00	295	0.69
" - Baker Lake	249.00	392	0.64
" - Coral Harbour	308.00	511	0.60
" - Repulse Bay	350.00	611	0.57
" - Chesterfield Inlet	243.00	352	0.69
" - Whale Cove	243.00	253	0.96
GREENLANDAIR (FIXED WING SERVICES)			
Sonder Stromfjord - Kulusuk	226.00	398	0.57
" " - Mestersuig	348.00	736	0.47
" " - Godthab	217.00	201	1.08
Godthab - Narssarssuaq	303.00	320	0.95
LABRADOR AIRWAYS			
All points in northern Labrador			0.437
AIR INUIT			
Kuujjuak - Aupaluk	83.00	115	0.72
" - Sugluk	210.00	454	0.46
George River - Deception Bay	235.00	518	0.45
Aupaluk - Sugluk	166.00	339	0.49
AUSTIN AIRWAYS			
Sanikiluaq - Great Whale River	58.00	106	0.55
Cape Dorset - Povungnituk	163.00	306	0.53
Akulivik - Great Whale River	256.00	402	0.64
Cape Dorset - Great Whale River	387.00	645	0.60
Sanikiluaq - Ivugivik	266.00	423	0.63
Akulivik - Cape Dorset	185.00	246	0.75
Povungnituk - Akulivik	51.00	63	0.80

CARRIER/ROUTE SECTOR	ONE-WAY FARE IN CDN. $	ROUTE MILEAGE	COST PER SEAT MILE $
NORDAIR (JET SERVICE)			
Asbestos Hill - Kuujjuak	172.00	322	0.53
Kuujjuak - Frobisher Bay	166.00	392	0.42
" - Great Whale River	297.00	400	0.74
Frobisher Bay - Nanisivik	308.00	769	0.40
Hall Beach - Resolute Bay	194.00	508	0.38
SOUTHERN ROUTES			
Montreal - Hamilton	110.00	383	0.29
Thunder Bay - Montreal	172.00	809	0.21
Thunder Bay - Toronto	141.00	565	0.25
PACIFIC WESTERN AIRLINES (JET SERVICE)			
Cambridge Bay - Resolute Bay	132.00	442	0.30
" " - Yellowknife	151.00	527	0.29
Resolute Bay - Yellowknife	248.00	967	0.26
SOUTHERN ROUTES			
Calgary - Victoria	125.00	451	0.28
Edmonton - Vancouver	133.00	514	0.26
Brandon - Vancouver	229.00	1038	0.22
SOUTHERN CARRIERS			
EASTERN PROVINCIAL AIRWAYS			
Charlottetown - Magdalen Islands	67.00	101	0.66
Goose Bay - Halifax	152.00	599	0.25
" " - Wabush	102.00	269	0.38
QUEBECAIR			
Blanc Sablon - Natashquan	118.00	240	0.49
" " - Quebec	283.00	1007	0.28
" " - Gaspé	198.00	613	0.32
Natashquan - Rimouski	178.00	573	0.31
" - Sept Iles	108.00	206	0.52

3.2.2 Cargo Costs

A survey of CTC approved fares for cargo will revealed a pattern not appreciably different from passenger fares.

In the case of cargo, it is usually much cheaper to ship by sealift. However, there are occasions when timing does not permit such arrangements to be made, and the buyer has no choice but to have the cargo sent by air.

In such cases, costs can again be extremely high. For example, the standard cost to ship an outboard engine to Pangnirtung is $400. The cost of sending an envelope anywhere in the Kitikmeot Region (Central Arctic) is $33, even though delivery occasionally takes up to 11 days.

Ironically, it is the official policy of the GNWT to assure that alcohol in the NWT will enjoy a standard price, i.e. that it will be no more expensive in Frobisher Bay than it is in Yellowknife despite transportation costs.[83] In a way, this is a subsidy for alcohol shipments which is not shared by food.

3.2.3 Unpredictability of Air Costs

Unlike the case of communications, an air carrier does not usually need to proceed through a hearing process for authorization to raise rates; instead, it is sufficient to file a revised fare schedule with the CTC.

In some cases, the impact on a community can be disruptive, either because of the size of the fare increases or because of their frequency. In either case, forward budgeting becomes impossible and the inflationary effect is severe. The following are two examples that speak for themselves.

In a little over 6 months (March 1st 1980 to September 7th 1980) the fare between Rankin Inlet and Whale Cove with Calm Air rose by 103%. This is an extreme example but rapid increases in fares are a norm.[84].

Nordair increased its rates at Frobisher five times for a total of 30% in the year prior to theAir Transport Committee's Inquiry.[85]

The carriers argue, of course, that there are "special circumstances" which justify such measures. It is conceivable that the situation for carriers along a particular route may indeed by extreme, from time to time; but is that necessarily a sufficient reason to impose such drastic consequences on a community?

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[83] In fairness, this practice is identical to the provincial system of standardizing alcohol prices throughout a given province: the largest single cost component is tax, and the government collects more or less tax depending on local costs.

[84] See "An Inquiry into the Adequacy of Commercial Air Service To, From and Within the District of the Keewatin," October 1980, p. 33, I.L. Proctor, Air Transport Committee, Canadian Transport Commission.

[85] See "An Inquiry into Complaints about theCommercial Air Service in the Baffin Island Communities," Ibid., p. 36.

3.3 *Impact on Cost of Living*

3.3.1 *General Tendencies*

Since transport costs are a component in the price of a wide variety of goods the underdevelopment of the transport system will (predictably) have a significant impact on the *cost of living generally*.

This impact is demonstrated in the indices of comparative retail prices and living costs compiled by Statistics Canada for use by the Treasury Board in determining Living Cost Differential (LCD) allowances for federal employees.[86]

Allowances are based upon a statistical assessment, by Statistics Canada, of the degree to which costs in these communities exceed the national norm. The national norm is given the figure 100; communities exceed that by up to 100% (e.g. Pelly Bay, in the Kitikmeot Region, has a figure of 200, meaning that it is *double* the national norm). The accompanying table provides an indication of the northern costs.

Certain features stand out. The gateway points that *have surface transport* access (Yellowknife, Churchill) are consistent with an index in the 120's range. Frobisher Bay which *does not* have road or rail or year round sea service has an index of 160.

For outlying points, the comparison between the NWT and the Yukon is revealing. Outlying points run 10 points higher that gateways in the Yukon *where road access continues* and, similarly, for points in the Western Arctic with road access. Points where onward shipment is by air or annual sea-lift run 20 to 30 points higher than the gateway point, dependent on distance. Pelly Bay, which has only air access, has the highest index at 200.

These figures again speak for themselves.

High transport costs have a multiplicity of effects. They not only affect the cost of living *directly* (by inflating the cost of goods), but also *indirectly* (by forcing employers to pay higher salaries, thereby increasing the cost of *local* goods and services). In short, the inflationary effect is *multiplied*.

These transport costs have repercussions socially. For example, it becomes almost impossible for family members in different communities to visit each other.[87]

However, perhaps the most obvious "social" impact is in the area of food and nutrition, as described below.

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[86] They are relative to eight different base cities in the south and have only 37% of the inclusions of the Consumer Price Index. The survey accuracy is only sufficient for an index in a ten point range (eg 150-159 .9).

[87] See *Air Passenger Travel in Northern Canada*, op. cit.

TABLE 3

Living Cost Differential (LCD) Indices

EASTERN ARCTIC, N.W.T.	
Arctic Bay	170+
Broughton Island	170
Cape Dorset	170
Clyde Inlet	180
Frobisher Bay	160
Griese Fiord	190
Igloolik	160
Lake Harbour	170
Pangnirtung	170
Pond Inlet	180
Port Burwell	190
Resolute Bay	160
Strathcona Sound	160

KEEWATIN, N.W.T.	
Baker Lake	160
Chesterfield Inlet	160
Coral Harbour	160
Eskimo Point	140
Rankin Inlet	150
Repulse Bay	170
Whale Cove	150
Churchill, Man.	120

WESTERN ARCTIC, N.W.T.	
Aklavik	140
Cambridge Bay	150
Coppermine	150
Fort Franklin	150
Fort Good Hope	150
Fort McPherson	150
Fort Norman	140
Fort Providence	130
Fort Resolution	130
Fort Simpson	120
Fort Smith	120
Gjoa Haven	170
Hay River	120
Inuvik	130
Nahanni Butte	140
Norman Wells	140
Pelly Bay	200
Pine Point	120
Rae	130
Snowdrift	150
Spence Bay	170
Tuktoyaktuk	150
Wrigley	140
Yellowknife	120

YUKON	
Beaver Creek, Y.T.	130
Brooks Brook, Y.T.	130
Carcross, Y.T.	130
Carmacks, Y.T.	130
Dawson, Y.T.	130
Destruction Bay, Y.T.	130
Dezadeash Station, Y.T.	130
Faro, Y.T.	130
Haines Junction, Y.T.	130
Mayo, Y.T.	130
Old Crow, Y.T.	160
Pelly Crossing, Y.T.	130
Ross River, Y.T.	130
Swift River, Y.T.	130
Teslin, Y.T.	130
Watson Lake, Y.T.	130
Whitehorse, Y.T.	120
Turgsten, N.W.T.	110
Atlin, B.C.	130
Haines Road, B.C.	130
Lower Post, B.C.	130
Pleasant Camp, B.C.	130
Taku River, B.C.	130

Source: Statistics Canada
Effective 1981

3.3.2 *Case Study: Food*

> When I was small, somebody gave me an apple. I didn't like it because if didn't taste like anything. Now that I like the apple, it costs too much to buy it.
>
> Tikivik[88]

The foregoing quotation underlines not only one of the absurdities which has been imposed upon the North, but also a serious social problem. There is no doubt that transport systems have enabled the wholesale import of various junk foods into the North, but Inuit have been joined by school officials and health officials in pointing out that many nutritouus foods (e.g. fresh produce and dairy products) are often at unattainable price levels. Clyde River has complained of milk costing over $4.00/qt. According to the Consumers' Association of Canada, transporting perishable foods to Frobisher Bay from Montreal adds 38% to the cost. The freight cost of some goods such as apples and oranges is actually more than their Montreal wholesale price. Many Inuit communities are situated even farther from southern suppliers and their cost of importing food is even higher.[89] According to the Air Transport Committee of the Canadian Transport Commission, food prices at the Hudson's Bay Store in Frobisher Bay are about double the Ottawa prices.[90]

This delimma harms non-Inuit at least as much; for example, both of the Parks Canada officials at Auyuittuq National Park were critical of the high rates for transporting food items to Pangnirtung from Montreal. Transportation accounts for $3.00 on the $7.50/5 lbs. of potatoes in that community.[91]

Food for the Co-op store in Pelly Bay must be brought in by Hercules aircraft at a cost of $17,000 a trip. As a result, a can of apple sauce that would wholesale for about 49 cents in Edmonton would cost a Pelly Bay resident $1.74.[92]

In Clyde River, the following were examples of costs (as of September, 1981):

Bread: $2.40/loaf
Onions: $3.70/2 lbs.[93]

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[88] This resident of Frobisher Bay gave his views in Inuktitut to the Northern Transportation Conference in 1970. See the proceedings at p. 182.

[89] Frobisher Bay Committee of the Consumers' Association of Canada, *Presentation on High Costs of Living*, Nov. 3, 1980.

[90] Air Transport Committee, *An Investigation into Complaints about Commercial Air Service to the Baffin Island Communities, op. cit.*, p. 40.

[91] *Ibid.*, p. 32.

[92] C.P. Wire Service, Feb. 9, 1981.

[93] "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities", *op. cit.*, p. 24.

Even health experts have become concerned. Reports such as *Availability, Cost & Nutritional Value of Imported Foods*[94] have fully documented the impact of high prices on Inuit health. Indeed, as far back as 1975, the Food Prices Review Board had made the following recommendation:

> To ensure that the types of food required to offset these nutrirional deficiencies are available to all northerners at a reasonable cost, the Board recommend that the cost of transporting a selection of these foods to the North should be subsidized by the federal Department of Indian and Northern Development.[95]

3.3.3 *The Government Response*

The lopsided cost of living in the North has been *fully recognized by the federal government*, which has responded with a highly elaborate system.

The present approach by government is to respond to the "stresses" of northern living with no less than *five sets of subsidies* -- which are *reserved for its own employees*.

- Environment Allowances
- Living Cost Differential Allowances
- Fuel and Utilities Allowances
- Assisted Vacation Leave
- Family Separation Allowances[96]

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[94] Published by the Science Advisory Council of the NWT as Working Paper No. 3, July 16, 1979. It was prepared by the NWT nutrition Liaison Liaison Committee. It has somtimes been argued in opposition that "the problem of nutrition may not be with the delivery system but rather with the system of education concerning the best use of what is available." Admittedly, it is always worthwhile to encourage better education, etc.; but that will not bring down the cost of a jar of apple sauce.

[95] *Food Prices in Northern Canada*. Food Prices Review Board, Ottawa, Dec. 1975, p. 33.

[96] See "Isolated Post Directive", Treasury Board. The Family Separation Allowances are mentioned in this directive; but properly speaking, they come under the "Treasury Board Relocation Directive", and would be available in instances or relocation anywhere in Canada. It is a coincidence that they happen to be relatively more used in the North.

TABLE 3
PREMIUMS FOR "ISOLATED POSTS"

(Source: Personnel Management Manual, Treasury Board)
July, 1982

	Environment Allowances	Living Cost Differential	Fuel & Utilities Differential	Maximum (3 allowances)
Arctic Bay	$2658-$4429	--	--	$ 4,429
aker Lake	" "	$3026-$5043	$1875-$3125	12,597
Belcher Islands	" "	2500-4166	1425-2375	10,970
Broughton Island	" "	3552-5920	1725-2875	13,224
Cambridge Bay	" "	2500-4166	--	8,595
Cape Dorset	" "	3026-5043	1725-2875	12,347
Chesterfield Inlet	" "	" "	" "	12,347
Clyde River	" "	4079-6798	1575-2625	13,852
Coppermine	" "	2500-4166	1875-3125	11,721
Coral Harbour	" "	3026-5043	" "	12,597
Eskimo Point	" "	1973-3289	" "	10,843
Fort Chimo	$1907-$3179	3026-5043	" "	11,347
Frobisher Bay	" "	" "	1275-2125	10,347
Gjoa Haven	$2658-$4429	3552-5920	--	10,349
Grise Fiord	" "	4605-7675	1875-3125	15,229
Hall Beach	" "	2500-4166	" "	11,720
Holman Island	" "	3552-5920	" "	13,474
Hopedale	" "	790-1316	1125-1875	7,620
Igloolik	$2658-$4429	3026-5043	1725-2875	12,347
Inukjuak	$1907-$3179	2500-4166	1425-2375	9,720
Inuvik	" "	1447-2412	1575-2625	8,216
Ivujivik	$2658-$4429	4079-6798	" "	13,852
Koartak	" "	" "	1425-2375	13,602
Lake Harbour	" "	3552-5920	1725-2875	12,147
Makkovik	" "	790-1316	625-1125	6,870
Nain	$1907-$3179	790-1316	1275-2125	6,620

	Environment Allowances	Living Cost Differential	Fuel & Utilities Differential	Maximum (3 allowances)
Pangnirtung	$2658-$4429	3552-5920	1725-2875	13,224
Payne Bay	" "	" "	1425-2375	12,724
Pelly Bay	" "	4605-7675	--	12,104
Pond Inlet	" "	4079-6798	1725-2875	14,102
Port Burwell	" "	4605-7675	1275-2125	14,229
Poste-de-la-Baleine	$1907-$3179	2500-4166	--	7,345
Povungnituk	" "	4605-6798	1875-3125	13.102
Rankin Inlet	$1907-$3179	2500-4166	1875-3125	10,470
Repulse Bay	$2658-$4429	3552-5920	" "	13,474
Resolute Bay	" "	3026-5043	" "	12,597
Rigolet	$1907-$3179	790-1316	825-1375	5,870
Sachs Harbour	$2658-$4429	3552-5920	1725-2875	13,224
Spence Bay	" "	" "	--	10,349
Sugluk	" "	" "	1875-3125	13,474
Tuktoyaktuk	" "	2500-4166	" "	11,720
Wakeham Bay	" "	4079-6798	1425-2375	13,602
Whale Cove	" "	2500-4166	" "	10,970

- Range of allowances depends on whether employee is married or single.
- Some communities not listed because of rarity of federal employees.
- The sum of the three allowances range from a low of $2658 for a single person at Arctic Bay to a high of $15,229 for a married person at Grise Fiord.

Southern-based companies have a similar multiplicity of subsidies and "perks" -- which, under the latest Revenue Canada remission order, have the added feature of being non-taxable.

The practical effect of this approach is *categorically and undeniably discriminatory:*

> *The response of the government and other southern institutions (to high northern costs) is not to reduce those costs, but to selectively subsidize the southern minority which has moved North, and hence leaving the northern self-employed person (e.g. hunter) to support the full burden alone.*

This is unacceptable. It should be the policy of government to *lighten the burden on the whole population, not just a handful of favourites.*

That is *feasible*. However, the first necessary step is this: the transport situation must be viewed as a *system*:

> A transportation system should not be viewed as air, road, and marine modes, but rather as a set of modal alternatives (that could be single or inter-modal) that offer a range of direct cost/level of service trade-offs. It is the level of service that determines the indirect costs that together with direct costs make up the total distribution cost. Indirect costs are also a function of the nature of the goods (e.g. value, size/density, perishability, etc.). A *developed transportation system gives a full range of choices* such that any particular goods can be sent by the mode that offers the *lowest total distribution cost*. An under-developed system has limited choices. This is the situation in most of the north. The choices are extreme between once a year sea-lift or the expensive air mode. The result is higher costs of living. . . .
>
> An example of modal choice is given by comparison of Yukon and NWT transportation. Even with only the rudimentary road system of the Yukon, air services are far less extensive than in the NWT. The implication is that a large portion of the passenger and goods movements in the NWT would go by road if this modal choice were available. Given a greater *range of modal choices*, the result is a lower cost of living.[97]

The ultimate objective, therefore, is to institute a *developed transportation system or its equivalent.*

> Recommendation 35: *The proper response to high northern costs should not be to selectively reimburse a handful of northerners (usually transients), but to provide an accessible and equitable system benefitting all northerners.*

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97. Wallace, *op. cit.*, pp. 14-15.

3.4 The Equivalent of a Developed System

3.4.1. Introduction

Earlier in this paper, it was explained how Canada had integrated the rest of the country to the national transportation grid by providing a *developed* transport system *or by simulating it.*

To provide a developed system to the North would be extraordinarily costly (aside from its environmental implications). The alternative is to simulate a developed system, by providing a pricing structure which corresponds to that of a developed system.

That means subsidies.

It is immediately recognized that the very word "subsidy" is sufficient to cause some concern among certain economists and officials. In response to that concern, a number of points must be raised, including the following:

a) As described in the previous section, the federal government *already has an elaborate (and discriminatory) subsidy system in the North*;

b) Refusal of a northern subsidy would be *even more discriminatory* in light of the systems which currently favour the rest of the country.

Those systems are described below.

3.4.2 National Practice.

As mentioned earlier, Canada has frequently chosen (for reasons of national policy) to provide subsidized transport services.

The *scale* of this operation is consistent with the size of the country itself. Subsidies to transportation take many forms. They can be: direct or indirect, for capital goods or operating costs, paid to producers or consumers, or distributional cross-subsidies between services. The federal government (Transport Canada and the CTC) will spend over $2.4 billion in transportation subsidies in 1982/83.[98]

Current subsidies in Canada are listed by mode:

1) Surface:

a) Maritime Freight Rates Act (MFRA) (since 1927)
- objectives are to compensate the Maritime region for additional costs due to the "circuity" of the Intercolonial Railway, offset greater increase in rates since 1912, and improve entry to Central Canada markets.
- amended by the Atlantic Region Freight Assistance Act (ARFAA) (1969) and various order-in-council

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[98] *Main Estimates*, Government of Canada 1982/83.

- provides 30% payment on all west-bound freight by rail *or truck* plus 20% on selected goods, 15% subsidy on all truck and rail movements within the "select territory".

- payments in 1982/83 are estimated at $12.2 million under MFRA and $59.7 million under ARFAA

b) National Transportation Act (1967) provides for various subsidies
   i. guaranteed branch lines (section 258), $84.7 million; a further $12.0 million is being given to the Canadian Wheat Board to acquire or lease hopper cars

   ii. passenger train services (section 261), 100% of losses,

   iii. payments under the Railway Act total $352.7 million for 1982/83.

   iv. Statutory Grain Rates (section 271 of the Railway Act, known as Crow's Nest Pass Rates), railway, losses of $145 million (1977), are cross-subsidized by other rail traffic.

c) Newfoundland Railways, payments for testing program and employee assistance of $29.0 million in 1982/83.

d) Grants and Contributions - money is paid to the provinces for highway construction programs, examples are the TransCanada Highway and support of highway strengthening in the four Western provinces, $188.2 million in 1982/83.

e) Contributions per the Railway Relocation and Crossing Act, $10.0 million.

f) Urban transport is budgeted for $54.2 million contributions in 1982/83.

2) Water Subsidies

a) Coastal and Island Communities - historically provided for transportation to isolated communities, $19.4 million in 1982/83.

b) Ferry service obligations (as part of the commitments of Confederation) also support regional development objectives, $152.9 million for Newfoundland and Prince Edward Island and $12.4 million for 1982/83 for British Columbia.

c) Canadian Marine Transport Administration (including Canadian Coast Guard), provides services to the marine mode at a deficit of costs over revenues (i.e. indirect subsidy) of $448.6 million in 1982/83.

d) Canarctic Shipping Company $4.5 million.

e) Bridges, $4.2 million

f) National Harbours Board, $57.5 million.

3) Air Subsidies

a) Regional Air Carrier Subsidies, $2 million

b) Airport Subsidies, (Grants) $24.1 million

c) Canadian Air Transport Administration, deficit of $390.8 million in 1982/83.

There is therefore little question of the large role of this mechanism in achieving national policy objectives.

3.4.3. *Theoretical Implications.*

The objective of these subsidies is, in part, to simulate a perfectly developed transport system where conditions do not otherwise permit that perfect development to take place.

There has, of course, been much discussion over the economic wisdom of subsidies. They are certainly unpopular among budget-cutting politicians. However, there are sound *economic reasons* why they nevertheless deserve close attention:

> Dr. John Heads summarized "The Economic Basis for Transport Subsidies" in his paper for the Canadian Transport Commission[99]. Economic efficiency is based on "Pareto *optimal allocation of resources*".[100] This requires *perfect competition*. In fact, the main argument against subsidies is that they cause distortions from the optimal allocation of resources to be achieved through competition. However, as Heads identifies, there are seven cases where the real world diverges from "pareto" requirements. Briefly, these are:
>
> 1) "Increasing returns to scale" are common in transportation systems particularly for capital intensive infrastructure; a subsidy is justified to the point where price is equal to marginal cost.
>
> 2) "Goods jointly consumed", also known as public goods, include (at least in part) such public works as highways and airports.
>
> 3) "Monopoly, obligopoly and all the other varieties of imperfect competition prevent the achievement of a Pareto-optimal distribution of resources". Thus subsidies are justified to off-set the effects of imperfect competition particularly where unexploited internal economics of scale make monopoly the most efficient form of organization.

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[99] Document ESAB 75-4, April 1974.

[100] This is defined as "one in which it would be impossible to reorganize production and distribution so that the utility of one or more individuals would be increased without decreasing the utility of others".

4) "Social costs and benefits" are not recognized in economic efficiency but often justify subsidies to achieve desired social ends.

5) "Income distribution" is also not considered as part of economic efficiency while it has long been the public policy to improve the distribution of income that is the basis of a progressive income tax and of transfer payments to provinces.

6) "Market frictions in respect of inadequate knowledge and resource immobility" can be overcome by subsidies used to improve areas such as consumer protection and labour mobility.

7) "Full employment and a stable level of prices" are generally conditions required for Pareto-optimality. The government often uses subsidies as part of stabilization policies.[101]

Heads notes that the transportation industry violates the Pareto requirements on all counts.

All of the above is especially true in the North. To quote Heads:

> *Subsidies on transport services to remote communities are justified on the grounds that the benefits of transport to these communities far exceed the sums carriers can collect in the market place and that these services must therefore be provided even though they do not cover costs.*[102]

The conclusion is clear. Canada has already taken extensive measures to integrate the East and the West to its transportation grid; it is time that it did so for the North. It is impractical to develop the *infrastructure* which would be the equivalent of the multi-modal aspects of a *fully developed system*; but it is possible to *simulate a fully developed system by providing cost levels which approximate a fully developed system.*

3.4.4 *Practical Implications.*

A subsidy system as described above would have incalculable benefits in terms of cost of living, nutrition, economic development and quality of life. It would integrate the North to Canada's transport grid, with all the attendant implications for sovereignty, public well-being and national plicy. It would be a step in fulfilling part of Canada's historical evolution.

Subsidy systems are in operation elsewhere in Canada for precisely those purposes. Those systems have been enacted for the national interest, their primary function is economic, but they also serve political and social purposes. This review of current Canadian subsidies demonstrates that the support of transportation for such government objectives as relieving isolation, regional development, and political cohesiveness is very well established. In view of this history, a general subsidy program supporting all of these objectives is a logical and rational means of encouraging equitable northern development.

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[101] Wallace, *op. cit.*, pp. 5-6.

[102] Heads, *op. cit.*, p. 42.

> *Recommendation 36: The Government's policy objectives for the North and for transportation in general require that all Canadians have the benefit of a developed transportation system. The objective of a subsidy program should therefore be to reduce transportation costs to what they would be in a developed transportation system.*

> *Recommendation 37 The objective could be expressed in quantitative terms to bring the cost of living index below LCD 115 for gateway points and a maximum of LCD 130 for any northern point.*

> *Recommendation 38 There are two alternative approaches to achieving the objective. One would be to actually develop a more mature transportation system through construction of road infrastructure. This would cost hundreds of millions of dollars, not to mention the extensive environmental effects. The more appropriate alternative is to subsidize the modes that are presently available to be able to offer rates and fares comparable to those of a developed system. In other words, subsidy can and should be used to "simulate" a developed transportation system where it is not yet economically efficient to actually build a developed system.*

3.5. *Application*

The subsidy proposal is not only desirable but workable. Indeed, R.S. Wallace Associates have added specificity to the subsidy proposal:

> While some of the subsidy could well go to surface and marine modes, the bulk of subsidy would likely go to the air mode. This may at first seem unreasonable to people who view the air mode in the southern context where the level of service is very high. The level of service (e.g. frequency, comfort, travel time, etc.) in the north is more comparable to surface modes in the southern system. In fact, *aircraft are the trucks and buses of the north*. The air mode in the north is not a luxury, it is a necessity.
>
> On a macro level, it is proposed that northern rates be *compared against a national average* or standard in order to set an overall subsidy level. Without a detailed study an accurate estimate of the overall cost is not possible. It is suggested that an appropriate order of magnitude level of funding would be around $10 million per year.
>
> Consideration has been given to macro level alternatives such as: a 50-75% subsidy on fuel, a flat percentage of published tariffs, or a flat number of cents per ton-mile/passenger mile. Any such macro scheme has risks of distortion and unintended effects (e.g. a carrier "tankering" subsidized fuel when heading south). To avoid these effects, it is necessary that the subsidy be administered on a micro or case by case basis. A Northern Transportation Authority could be created to do this. Administrative efficiency would likely require payment of the subsidy to producers of transportation services, but the majority of the policy-making board of the proposed agency would be from user groups to protect the consumers. A small staff of three of four should be adequate to administer a $10 million program dealing with less than 30 "clients".

The actual working of the subsidy could be:

1) carriers continue to file their tariffs based on full costs;

2) the agency, based on set criteria and comparative analysis, advises carriers of the maximum subsidy it is willing to pay against each tariff to bring the cost in line with that of a *developed* system (e.g. unit costs comparable to trucking costs);

3) it remains in the carrier's interest to charge the lowest possible tariffs to stimulate traffic;

4) the carrier provides the ticket coupon or waybill showing what was paid by the user and the agency *pays the difference* (up to the maximum) from the carrier's published tariff.[103]

For example, a carrier along a certain route would file for a passenger tariff of $250. The agency estimates that over a comparable route elsewhere in Canada, the median intermodal cost is $150. Accordingly, it proposes a $100 subsidy.

The carrier can still charge *anything he wishes*. He can charge *under* $150; but if he charges *over* $150, his subsidy payment is *reduced* accordingly. For example, if he charged $180, he would receive a $70 subsidy instead of $100. Furthermore, in the words of the report,

> Any distortions or inequities can immediately be brought to the agency's attention or appealed to its board, and adjustments made by telex notice to carriers.
>
> This proposal is administratively straight forward, broad enough to achieve its objectives, but flexible enough to adjust to any change in circumstances.[104]

How does this proposal compare to the *existing* subsidies which the federal government provides for other parts of Canada? Transport Canada's own Policy Guidelines for Transport Subsidies[105] details criteria for the formulation and administration of a subsidy program. These are:

1) Clear identification of the social, economic and/or political goals of the subsidy program. (Both 1st and 2nd order goals should be specified.)

2) Evaluation of the ability of the user to pay.

3) Clear statement of how the subsidy program would affect the transportation system to bring about the desired benefits.

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[103] Wallace, *op. cit.*, pp. 17-8.

[104] *Ibid.*, p. 13.

[105] Document TP2364, December 1978.

4) Estimation of the benefits.

5) Identification of the costs, both economic and social.

6) Estimation of the costs.

7) Identification of other methods of fulfilling the same goals.

8) Examination of the feasibility of new methods or possible changes in the program.

9) Evaluation of the program administration.

The consultants deliver the following response:

1) "Clear identification of the social, economic and/or political goals of the subsidy program."
   1st order - reduce the level of transportation costs to what they would be in a developed transportation system in order to provide accessibility and equity for users.
   2nd order - social - reduce cost of living, improve quality of life, nutrition, health, and reduce isolation.
   - economic - facilitate viable economic development.
   - political - recognize the right of northern people to reasonable transportation, increase contact between northern and southern Canada to improve national identity of citizens.

2) "Evaluation of the ability of the user to pay."
   The majority of consumers are Inuit who, due to a lack of opportunities and wage employment, have very limited ability to pay. Southerners who receive northern allowances would have these reduced as the cost of living comes down leaving their net position the same. Corporations who receive the benefit, of reduced costs would have more income to be taxed.

3) "Clear statement of how the subsidy program would affect the transportation system to bring about the desired benefits."
   Under the proposal, carriers receive no benefits except for stimulated traffic. Rate setting would continue as with the current economic and regulatory system. The proposed procedures ensure that the user gets the benefit.

4) "Estimation of the benefits."
   This is not possible before the government conducts its analysis of the proposal. It is likely that a multiplier effect would realize benefits several times the cost.
   A further benefit would be cost savings in other programs such as:
   a) reduce postal costs, many small shipments are now mailed by northerners because mail rates are cheaper than freight rates (common postal rates across the country are a further precedent for the form of subsidy proposed);

  - b) reduce health care costs because nutrition will improve (this effect has been demonstrated in the Northern Saskatchewan transportation of food subsidy program);
  - c) reduce northern allowances; etc.

5) "Identification of the costs, both economic and social."
No social costs are apparent; the only economic cost is the subsidy budget, net of cost savings.

6) "Estimation of the costs."
This also requires detailed study. Something in the order of $10 million would be a reasonable funding level to start.

7) "Identification of other methods of fulfilling the same goals."
  - a) Building roads (prohibitively expensive and environmentally damaging);
  - b) Blanket subsidies (distortions likely);
  - c) Payments to citizens (no direct linkage of the use of money for the transportation objective).

8) "Examination of the feasibility of new methods or possible changes in the program".
Not applicable as it is a new proposal.

9) "Evaluation of the program administration".
The proposal is designed for simplicity while retaining flexibility and responsiveness.[106]

Admittedly, other forms of subsidy are conceivable. Some observers (e.g. in the airline industry) have suggested a voucher system. Various formats are open to debate; however, the foregoing should serve as and essential starting point for the expeditions resolution of the northern cost problem.

> *Recommendation 39 A transportation authority should be created with the mandate of developing tables of comparison between northern tariffs and the tariffs of the "developed" southern transport system, e.g. via truck and bus.*
>
> *Recommendation 40 The authority should further be budgeted and mandated to receive applications for tariffs, and to offer subsidies which would bring those tariffs into line with those os a developed system.*
>
> *Recommendation 41 This subsidy proposal is presented to simulate the rates of a developed transportation system where it is as yet uneconomic to actually provide them. It is necessary to achieve the objectives of the federal government's transportation policy and northern policy. The program has direct causal linkage to a whole series of social, economic and political goals. Hence, the federal government should demonstrate its commitment by immediately commissioning the research and analysis necessary and creating the structures necessary for its implementation.*

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[106] Wallace, op. cit., pp. 18-20.

3.[illegible]. *Adjustments to Subsidies*

The question of subsidies has been discussed for some time. Arguments against the concept vary, and range from simple inertia to an unwillingness to grant the North the same (budgetary or otherwise) treatment that Canada has traditionally granted to East and West. Neither of these positions has any validity.

There is, however, one argument against subsidies which deserves further consideration.

Subsidies would lower the price of foods in a way that could be equally upsetting from a dietary standpoint: that threat could materialize *if* southern foods became so economically attractive that they undercut the market for local foods.[107] For example, the Hunters and Trappers Association in Frobisher Bay has expressed the concern that food subsidies could create a dependence on southern foods to the detriment of more nutritious country food.[108] This problem is not very prevalent among members of the older generation; but among adolescents, southern junk foods are often considered "trendy".

The response among some officials has occasionally been facile: they recommend against subsidies. That is not a solution. If communities are concerned that market forces are allowing too much junk food into communities, the proper response is *not to charge prohibitive costs for all southern foods*, but rather:

a) to vest more control in the community to control the foods imported,

b) to negotiate understandings between community groups and retailers whereby a premium is charged on junk foods in order to subsidize more nutritious foods (e.g. country foods); and

c) to provide older Inuit with the opportunity of explaining the value of country food in the school system (i.e. to those most in need of this information[109]).

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[107] Inuit consumption of carbohydrates has already increased by 400% since the 1950's: see "Inuit Poor Fighters Against Modern Disease, *News/North*, July 2, 1982, p. A9.

[108] Similar concerns are implicit in DIAND's *Phase I Northern Food Costs Study*, Aug. 1981. For example, seal meat has 6-10 times as much Vitamin C as beef. Seal liver has 16-20 times as much Vitamin D as beef. See also *Dietary Habits of Native Populations*, Science Advisory Board of the NWT, 1980.

[109] Such an approach would be consistent, for example, with plans presently being developed by the Inuit Cultural Institute for "cultural" education generally.

Recommendation 42 To counterbalance the effect of southern subsidized foods, The Bay, co-ops and other food retailers should be encouraged to enter into agreements with municipal councils and other community groups whereby country foods would be promoted in the stores and junk foods would be restricted.

Recommendation 43 Similarly, the school system should make arrangements with Inuit Cultural Institute or with other appropriate Inuit organizations for lectures on the value of country foods.

3. . . *Discounts*

Most carriers in Canada offer discounts for freight and passengers. In the case of freight, the discount is for volume; this subject will be discussed later. In the case of passengers, it is for advanced booking or for special cases such as senior citizens.

In the North, however, some carriers such as Labrador Airways and Calm Air do not have excursion fares or special fares.[110]

Other Northern carriers often provide such special reduced rates but they are not widely known among the Inuit.[111] The report for the Canadian Transportation Commission recommends "steps to inform the people of these communities of the availability of the discount fares."[112] ~~That assumes~~, of course, that such discounts are in~~augura~~ted.

In other cases, discounts have been suggested but have been turned down by officials. A case in point was the proposal by Mr. Eric Anderson, then Vice-President of PWA, to provide a passenger discount to carriers of territorial drivers' licenses. It appears that this proposal found no favour at the Canadian Transport Commission.

An interesting response to the question of discounts on cargo (where applicable) is the creation of purchasing companies such as Northern Purchasing and Expediting in Rankin Inlet. This is an enterprise whereby local businessmen pool their purchases in order to avail themselves of bulk discounts.

There are indeed some officials who argue that the "cure " for high costs in the North is the systematic use of discounts by the entire population. They describe a scenario in which every housewife would be calculating inventory, ordering bulk purchases, planning storage and consumption rates, and capitalizing on discounts.

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110. See "An Inquiry into the Adequacy of Commercial Air Service To, From and Within the District of the Keewatin", op. cit., p. 44.

111. See "An Investigation into Complaints about the Commercial Air Service to the Baffin Island Communities," pp. 25, 33 and 24, R.G. McLaughlin, Air Transport Committee, Canadian Transport Commission, September 1981.

112. Recommendation 9.1. See *Ibid.*, p. 79.

This scenario is interesting, but presumes a great deal. Is it reasonable or even *fair* to expect northerners (particularly those whose first language is Inuktitut) to engage in paperwork and systems planning which is far above and beyond anything a resident of Toronto or Ottawa is expected to do? From a human standpoint, the response to high northern costs is not to burden every household with the responsibility of turning itself into a miniature cartage company.

> *Recommendation 44: Northern carriers should offer discount fares, senior citizen discounts and other special fares comparable to the pattern of the rest of the airline industry.*
>
> *Recommendation 45: Northern carriers should fully publicize such discounts to the Inuit in the various communities and regions.*
>
> *Recommendation 46: Bulk discounts and other discounts should be available on cargo along the same lines as elsewhere in Canada.*
>
> *Recommendation 47: Discounts should not be viewed as a substitute for across-the-board subsidized rates.*

Part 4. Daily Transport.

Snowmobiles are the basic form of land transportation for the Inuit population, and are usually essential for any wildlife harvesting activities.

The topic of snowmobiles is being dealt with by Mr. Peter Pool in a separate paper at this conference. Accordingly, the following touches only upon certain economic features.

The three basic vehicles for contemporary wildlife harvesting are the snowmobile, the all-terrain vehicle (also called "three-wheeler" or "ATV"), and the aluminum boat, usually powered by an outboard engine. Federal excise tax inflates both the purchase price and the operating cost of all these items.

There is a 9% federal sales tax which is imposed on the manufacturer's price for almost every major product that Inuit hunters buy, including snowmobiles, boats, motors, guns, ammunition, fishing equipment, etc.

The tax is imposed at the time the product leaves the *manufacturer*. For example, if CIL produces $100 worth of ammunition, CIL must pay $9 in tax. Consideration is being given to transferring this tax to the level of the wholesaler;[113] since the wholesale price is higher than the manufacturer's price, the net result would be an increase in costs to the consumer.

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[113] This proposal was mentioned, for example, in the November budget of 1981.

This tax treatment is inappropriate. Under the *Excise Tax Act*, food producers are exempt from this tax: in other words, if the manufacturer is selling his product to a food producer, no 9% tax will be imposed anywhere along the line. That situation applies, for example, to all farming equipment.

It would be logical to introduce a slight amendment in the *Excise Tax Act* to include hunters among food producers. As such, whenever a manufacturer sent hunting and fishing goods north to be used by hunters, the tax would not be imposed. The saving should, at least in principle, be passed on to the Inuit hunter.

Federal tax on gasoline also inflates the operating costs of the Inuit hunter by inflating the cost of gasoline. The tax amounts to 1.5c /Litre (7¢ /gallon).

In principle, this tax should be *refundable*;[114] however, this refund is usually available only if the hunter is classified as "commercial".

That prospect is theoretically feasible, but unadministrable in practice. If the hunter were to be classified as "commercial", Revenue Canada would likely feel compelled to assess the "earnings" of the hunter as taxable income. That is difficult, in view of uncertainties over the monetary value of country food. Furthermore, if the high costs of hunting were treated as deductible expenses for tax purposes, the net tax revenues would be so low that the paper burden on Inuit and Revenue Canada alike could not be justified.[115]

It is therefore of little practical utility, from the standpoint of either the government or the Inuit, for hunters to classify themselves as "commercial" for excise tax purposes. However, this means that Inuit are left in a less desirable tax situation than they would otherwise deserve. Accordingly, thought should be given as to whether, in the case of Inuit hunting, this classification needs to exist at all, or whether the criterion of "commercial" should more appropriately be dropped.

Finally, some Inuit must pay a provincial tax on gasoline, ostensibly to support roads-even though there are virtually no roads in their area. This is obviously inequitable.

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[114] See *Federal Excise Gasoline Tax Refund Information*.

[115] In fact, the overwhelming majority of Inuit file income tax returns. Those tend to be extremely simple: it is rare for the party to declare either hunting income or hunting expenses, as these two tend to balance each other out.

> *Recommendation 48: Inuit hunters should be classified as "food producers", and hence be exempted from federal sales tax on their equipment.*

> *Recommendation 49: Inuit hunters should be eligible for the commercial refund on federal gasoline tax, and a similar refund should be negotiated for provincial "roads" tax on gasoline.*

PART 5. TRANSPORT AS ENTERPRISE

5.1 *General*

Above and beyond the economic implications discussed earlier in this paper, transport has economic consequences such as employment, training and business opportunity.

Transportation enterprises are a basic component of the arctic economy. In some cases, the spinoff can be positive, as in the creation of worthwhile jobs; in other cases, no such spinoff exists and the Inuit can be expected to view such projects with skepticism.

In that sense, transport projects bear a certain resemblance to many other northern projects. Until relatively recently, there appeared to be little interest among southern entrepreneurs to provide any meaningful share to native people. The unwritten assumption was that native people could have "identity" or "prosperity", but not both:

> In the past, government initiatives have been determined by considerations of *basic maintenance*. We have always been running harder just to keep up with inadequate social and economic standards. This is not the way native people want to go in the future. It never was. [116]

The consequences of this approach received this comment from the Minister of DIAND:

> You are aware, of course, of the bitter controversy during the last decade over proposals for constructing a pipeline down the Mackenzie Valley. It was in part related to fears over possible destruction of communities, the serious impairment of a fragile environment, and the disruption of native lifestyles.
>
> But it was also a battle over economic power-sharing. [117]

This experience appears to have given the government a new awareness of the larger picture. Native people are no longer pigeon-holed as being "anti- progress" when legitimate land claims proposals are advanced. On the contrary,

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116. Hon. John Munro, speech to the World Assembly of First Nations. July 21, 1982, p. 12.

117. Hon. John Munro, "Canada's Multi-Billion-Dollar Projects: What Price, What Rewards?" Speech to the Empire Club, Toronto, April 1, 1982. p. 24.

> The basis of the Indian and Inuit claims is that their forebearers lived on the land and used it for thousands of years. Over the centuries, their attachment to the land has been unbroken. They continue to claim the right of access for building their homes and for their hunting, trapping and fishing.
>
> The rights of native people must be respected. In this, we are guided by considerations of fairness and equity. The native people are concerned about their present and future communities and their traditional livelihood. They must share in, and be part of, northern development.
>
> They, too, want northern development, but not at the price of destroying their homes, culture and lifestyle.
>
> The government not only recognizes that native people have rights that cannot be merely "bought" with financial compensation. Timely claims settlements must also affirm cultural integrity and assure participation in development and the Canadian community. [118]

That "participation" was summarized by another Cabinet Minister as follows:

> We've come a long way in a decade or so. We've learned to respect the values and interests of the people who inhabit the north and who make their living there. We've come to accept the fact that northern residents must have access to jobs and opportunities to participate as suppliers and equity partners. We have a better understanding of the fragile environment and the need to preserve it for the protection of northern lifestyles and economic pursuits. We've come to realize that it makes good business sense to work in a spirit of co-operation with people who know the north and who can make all the difference to the success of a northern venture.
>
> It is government policy, and the policy is now enshrined in the legislation, that the north must be developed for the benefit of all Canadians. It must be developed prudently and with loving care for the environment and concern for the wildlife of land and sea. And it must be developed in partnership with northern residents who are willing to be risk takers and active participants. This is the direction of the future. [119]

The Minister of DIAND has even drafted a "shopping list" of items which are necessary to make the foregoing aspirations a reality:

> The native peoples and other northern residents should have the opportunity to participate in projects as employees, as managers and supervisors, as sub-contractors, as shareholders and as owners.

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118. *Ibid.* p. 20.

119. Senator Jack Austin, on behalf of John Munro, to the Canadian Club, Edmonton. June 17, 1982, p. 20.

> This kind of diverse economic participation by northern residents is already in place to a limited extent, and we must encourage more of it.
>
> Experience with northern development will also give northern residents an opportunity to acquire a variety of new skills, which they will then be able to apply in other ways in their own communities and in other parts of Canada if they so choose.
>
> It will also expose them to management experience, which they will be able to transfer to their own industrial and commercial undertakings. This management expertise is already being developed, but it should be increased and enhanced.[120]

These arguments are applicable to the transport sector. Employment, training and equity in transport underline a basic principle: *Inuit must be entitled to participate in this essential component of the economy of the Inuit area.*[121] It is unthinkable that such enterprises in the North should be merely a collection of transplanted southerners. The local population must be capable of participating in its own economy with respect to the work force, the skills involved, the administration and control of economic life, and the profits which flow from the North. This is true of the economy as a whole; and it is particularly true of transport enterprises. *Inuit must have a stake in their lifeline to the rest of the world.*

> *Recommendation 50: Inuit must have a proportionate stake in the employment, training and equity available for arctic transportation.*

5.2 *Employment*

5.2.1 *Employment Targets*

A casual observer might believe that the ideal percentage of Inuit in northern transport positions would correspond to the Inuit portion of the population. If one is glued to a notion of "parity", then mathematically if Inuit represent over 80% of the arctic population, Inuit should "ideally" occupy 80% of the jobs at unskilled, skilled and decision-making levels.

From the perspective of Inuit, that objective would need some modifications and refinements. The position of the typical Inuk in the workforce is not likely to be identical to that of the typical non-Inuk: for Inuit, the dedication of a large part of one's time to hunting is a matter of personal and collective *identity* which must be taken into account. Hunting is closely linked to perceptions of pride and dignity. For an Inuk to abandon hunting altogether in favour of permanent employment (in a transport enterprise or elsewhere) would be the exception and not the rule; instead, time-sharing and flexible leave arrangements would be relatively more important. Accordingly, the target is not to have a standard nine-to-five workforce which is composed 80% of Inuit individuals, but more precisely to have a "pool" of qualified Inuit on which to draw and who are capable of filling 80% of the positions at any given time.[122]

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[120] Speech to the Empire Club (April 1, 1982) *op. cit.* pp. 28-9.

[121] See ITC's presentation, by Michael Amerook, to the Parliamentary Task Force on Employment Opportunities in the '80s, March 2, 1981.

This target is achievable; however, it requires a recognition of certain realities in the North. Amont the most important realities are:

a) Inuit have a strong commitment to family and friends within their own community. Leaving the community for long periods of time is not considered desirable.

b) A recognition that satisfying positions usually require *training*, and that the Inuit trainee has certain specific needs which must be understood if the exercise is to be successful.

Failure to deal with these realities usually leads to frustration on the part of all concerned. *Inuit participation in the workforce*, for example, *cannot be simply willed into existence.*

A case in point is the experience of Nanisivik Mines. The federal and territorial governments had signed an agreement providing for a goal of 60% Inuit employment; instead, Inuit number approximately 20% of the workforce.[123]

As a result, industry has sometimes argued that local employment objectives should be *thrown out altogether*, as being futile and unenforceable. Government officials have sometimes *bought* that argument: for example, agreements for the Arvik Mine on Little Cornwallis Island dropped all numerical reference to local employment targets.

The above situation rests upon two premises which both appear equally unacceptable. The first is that one poor experience (for any of a *number* of possible reasons)[124] entitles industry to disregard the local population entirely. The second is that it is incumbent upon Inuit to transform *themselves* in order to satisfy an outside company, rather than for the company to adapt to the region from which it is going to derive a profit. These premises appear more suggestive of a Third World situation than what would be considered acceptable within Canada.

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[122] For example, most Coppermine residents working *on rotation* for Gulf Oil in the Beaufort Sea "found it congenial to their preferred life-style, even to the point of choosing rotation employment over full-time work in Coppermine." Charles W. Hobart, "Impact of Commuting Employment on Coppermine in the Northwest Territories" *Proceedings: Conference on Commuting and Northern Development.* Institute for Northern Studies, University of Saskatchewan. Saskatoon, February 15-17, 1979. p. 192.

[123] *Proceedings of the Special Committee of the Senate on the Northern Pipeline.* Brief by ITC, BRIA and LIA, May 18, 1982. pp. 12-13.

[124] Hobart argues, for example, that a work period in excess of 20 days causes problems; at Nanisivik, the work period of 42 days directly contributing to a 98% annual turnover of Inuit employees. See "Commuting Work in the Canadian North", *Proceedings: Conference on Commuting and Northern Development, op. cit.* It is not suggested, of course, that the turnover is due *exclusively* to rotation.

The proper answer is to recognize the self-evident proposition that the North is unlike the South. Failure to do so can lead to untold hardship, as witnessed by the Canadian Armed Forces. The Department of National Defense has a special program to recruit "native northerners"; and between April 1971 and April 1982, DND had succeeded in recruiting 109 Inuit, Indians and Métis from North of '60. Of those 109, *90 were released;* and of those 90, *three quarters* had the following explanation entered in their files: "Inability to adjust to a military lifestyle (homesickness)." 125

On the other end of the scale, one finds operations which are *almost entirely staffed* by Inuit, and in which Inuit have taken over technical and administrative positions in virtually record time. One example is the field of communications; the lessons learned by Inuit Broadcasting Corp. and Taqramiut Nipingat Inc. will be described later. Another is the case of municipal governments: their direction and administration is now in predominantly Inuit hands, and this shift to local control has generally been both smooth and efficient.

Why have fields such as communications and municipal administration been examples of success stories, whereas other areas have not? The answer is again two-pronged:

i) There was a sense of *conviction* that Inuit must fully participate in these crucial areas affecting their future; and

ii) The *differentness* of the North was not ignored; training and employment programs recognized it and turned it to advantage.

Another important feature (not coincidentally) was that these institutions were Inuit-controlled, as this paper will describe at a later point.

There is therefore no doubt that a strong and healthy Inuit participation in the work force is *feasible*, assuming a) the proper *commitment*, and b) the proper *techniques*.

The federal government, at least, has recognized its commitments in this area. In 1978, it announced a Native Employment Policy with the specific purpose of a)*attracting* more native people into the civil service, and b) identifying and reducing the institutional *barriers* which stand in the way. Transport Canada's 1982-83 action plan goes so far as to "encourage departmental managers to develop *numerical targets* for the training, recruitment and employment of native people (emphasis added). 126 That is a precedent worth pursuing, if other requisite conditions (such as proper program design) are met.

There are, however, two major areas in which the federal government has filed to live up to the commitments enunciated in the Native Employment Policy.

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125. *Annual Report on the Participation of Canada's Native Northerners in the Canadian Forces.*

126. *Indigenous Peoples Program Annual Review and Action Plan.* Transport Canada, March 31, 1982. p. 7.

The first is in program design and supervision. Originally, it had been felt that the most effective design and implementation of the program could be accomplished if the Public Service Commission, the Treasury Board and the native organizations worked *together* for that purpose. Accordingly, a "Joint Council" was created with representation from these groups. The Joint Council has worked well (whenever given the opportunity), and has come forward with constructive approaches, such as the negotiation of the Native Employment Program with Crown corporations.

The difficulty is that the Joint Council was given virtually *no resources* to carry on its work. In the work of the Royal Commission on the Disabled and Handicapped, it was reported that:

> (The Royal Commission's) Recommendation 3 (was to) Provide resources to the Joint Council to improve implementation of policies to hire native persons in the federal service. The Inuit Tapirisat of Canada is a member of the Joint Council. They have repeatedly asked for funds to facilitate a more constructive participation as outlined in the recommendation. The Public Service Commission acknowledged that the recommendation has merit. There has not been a positive response, however to ITC's request nor to the recommendation, by Treasury Board or the Public Service Commission.[127]

The second problem is that the Native Employment Policy does not apply to Crown corporations -- who often have more of an impact on certain communities than does the federal civil service. Why should NTCL be subject to a set of rules different from Transport Canada?

The Joint Council's strategy to correct this situation was to attempt to get its "foot in the door" by persuading one Crown corporation to "opt in", and then to encourage the others to follow suit. However, there is no indication how *long* this would take; nor is there any expectation of speedy action if the Joint Council itself is *hamstrung*. Unless this situation is corrected, the thrust of the 1978 Native Employment Policy will be subverted. That correction again requires a two-pronged approach: a) for the federal government (e.g. via the Cabinet) to express its *commitment*,[128] and b) to give the Joint Council the means to supervise implementation.

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127. *Obstacles: progress Report.* Royal Commission on the Disabled and Handicapped. June, 1982. p. 164.

128. The Cabinet has seldom been too reluctant to impose commitments upon Crown corporations, as witnessed by the recent imposition of the "6 and 5" principle on those bodies.

The conclusion is clear: a high level of Inuit employment in northern enterprises (notably transport) is not only desirable but feasible. Training is also an indispensable element.[129] However, it is absolutely fundamental to recognize that there are features of these questions which are peculiar to the Arctic. The question is therefore not *whether* Inuit will play a full role in transport industries, but *how*.

> Recommendation 51 : *The level of Inuit employment in Arctic transport should correspond roughly to the Inuit percentage of the Arctic population; however, that does not necessarily mean that Inuit employees will be identical to southern employees.*
>
> Recommendation 52 : *Employment programs must adapt to northern conditions.*
>
> Recommendation 53 : *The objective should be to create a "pool" of qualified Inuit who can share work and yet continue traditional pursuits, rather than a standardized labour force along southern lines.*
>
> Recommendation 54 : *Inuit participation cannot be merely willed into existence. Any such employment program must be planned, on the basis of distinct northern realities.*
>
> Recommendation 55 : *The failure of quotas in the past is no proof of the inapplicability of the quota system. Corporate efforts to debunk quotas on that basis should be viewed with skepticism.*
>
> Recommendation 56 : *Any program for employment and training must be based on a) a sense of conviction, and b) a recognition of the distinct characteristics of the Inuit employee.*
>
> Recommendation 57 : *Numerical quotas deserve further study.*
>
> Recommendation 58 · *The Joint Council should be given the necessary resources to do its job re federal hiring practices.*
>
> Recommendation 59 : *The Native Employment Policy should be extended to Crown corporations (by Cabinet order if necessary).*

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[129] Training has had a prominent position even in ITC political proposals. ITC's document *Political Development in Nunavat* (1979) referred to lead-time in the various stages of evolution of the Nunavat area from territorial status to eventual provincehood.

5.2.2 *Profile of Employees*

Although there are exceptions to every generalization, it is still possible to develop some "rules of thumb" concerning Inuit employees.

Some employment programs have been badly designed, and thus have generated poor work records (e.g. Nanisvik's 98% annual turnover rate, although this is also due to other factors including the differentness of a mining operation). However, in the case of other programs, results have been positive. The following example, from Coppermine[130] is a case in point:

> The data show that 44 percent of the Coppermine workers were rated excellent or good, 46 per cent were rated average and only 8 per cent were rated below average.
>
> Ratings on ability to withstand stresses of work in the Arctic show that the Coppermine men were evaluated more highly than the southerners: 66 per cent of the former as compared with 47 per cent of the latter were rated as good or excellent. Camp citizenship ratings show virtually identical distributions for the Coppermine and the southern workers with 53 per cent rated good or excellent, and only 7 per cent below average. Workers' strong and weak points were identified by the foremen for less than half of the workers. These show that the Coppermine men generally were rated as well in terms of most strong points as the southerners, and were inferior only in terms of English language ability and experience. Southerners were seen as more often irritable and lazy.

Table "Strong Points" of Workers Reported by Supervisors, By Category of Workers

Strong Points	Category of Worker			
	Coppermine		Southern	
	N	%	N	%
Good Worker	11	55	36	48
Careful/Knowledgeable about Equipment	0	0	6	8
Stands Cold Well	1	5	2	3
Likeable - Gets Along Well	4	20	6	8
Interested, Alert	1	5	7	10
Adaptable - Can Do Most Things	2	10	9	12
Other	1	5	9	11
Total	20	100	74	100

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[130] Employment program operated by Gulf Canada.

Table: "Weak Points"of Workers, Reported by Supervisors, By Category of Workers

Weak Point Mentioned	Category of Worker							
	Coppermine		Southern		Delta		Total	
	N	%	N	%	N	%	N	%
Inexperienced	8	34	16	25	0	0	24	27
Lazy	3	14	13	20	0	0	16	19
Moody, Irritable	1	4	8	12	0	0	9	10
Doesn't Speak/ Understand English	6	26	2	3	0	0	8	9
Undependable	1	4	3	5	0	0	4	4
Always Looking for a New Job	0	0	4	6	0	0	4	4
Too Young	1	4	2	3	0	0	3	3
Other	3	14	17	26	2	100	22	24
Total	23	100	65	100	2	100	90	100

A final question asked "If you were hand-picking a first-rate crew, would you select this man?" Supervisors answered affirmatively for 63 per cent of the southern workers and 60 per cent of the Coppermine workers. Again this is probably an inflated figure for the southern workers since ratings could not be made for 43 per cent of the southern workers, who were short-term and generally inferior. In comparison, only 16 per cent of the Coppermine workers were not rated by the foremen.

Data are also available on the number of weeks worked and work interruptions for all Gulf exploration personnel in the Delta area during the 1973-1974 season. Information on the number of weeks worked for all men employed in the Mackenzie Delta program, shows that Coppermine workers generally worked more weeks than the southern workers. Thus, almost twice as many (39 per cent) southern employees, as compared with 21 per cent of the Inuit employees worked less than six weeks. Information on number and type of work interruptions show that the southern workers had fewer interruptions than did the Coppermine men, 24 per cent of the latter having unexplained interruptions. However it is probable that some of these were due to illness of the worker or of a close family member, which was not communicated to Gulf because of language problems. It should also be remembered that 39 per cent of the southerners worked for Gulf no more than two work periods and so had little opportunity to experience work interruptions. These data and the informal interviews which were held with the foremen attest that by the end of the second year of work experience, the Coppermine workers were proving to be quite as satisfactory as the southern workers.[131]

Table Total Weeks Worked, By Category of Worker

Workers	Weeks Worked											
	2 weeks or less		2 - 4 weeks		5 - 8 weeks		9 - 14 weeks		15 or weeks		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Coppermine	6	10	7	11	13	21	18	29	18	29	62	100
South	96	26	50	13	64	17	84	23	77	21	371	100

Similar conclusions were reached on a number of other projects.[132]

> *Recommendation 60 : The performance and dedication of Inuit employees, if given the proper conditions, will exceed comparable southern workers. Any corporate myths to the contrary should be abandoned.*

5.2.3 *Design of Programs*

Later in this paper, a description will be given of the pitfalls which can occur in training programs which are developed without the benefit of local input, particularly by the native organizations directly affected. Put bluntly, an organization cannot expect to run an effective program without *first-hand* knowledge of the people it is dealing with.

The same applies to employment programs, even for positions which are relatively unskilled. On the premise that it is better to be safe than sorry, one company did the following when it designed its employment program (for Coppermine):

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[131] "Impact of Commuting Employment", *op. cit.* pp. 176-9.

[132] *Ibid.*

1. A management team was formed to explore the feasibility of this program for the community in late spring of 1972.
2. Other corporations who had native people working for them were consulted, as was the Territorial Department of Education.
3. A meeting was held in Coppermine with the Settlement Council and the employment possibilities were discussed. The Council was told that it could veto the project if it wished.
4. Following Council approval, a public meeting for all interested residents was held in Coppermine, where company officials talked about oil work and the proposed employment program, and showed films and slides. At this meeting interested men were invited to apply for an interview.
5. All applicants were interviewed and application forms filled out by an employee and a representative of the Special and Continuing Adult Education Department of the Territorial Government.
6. Details of the program were worked out in consultation with the Settlement Council. The Council gave its opinion on the duration of the work rotation period and on the day on which crew changes should be made. It also nominated two men for the post of liaison person, to be hired by the Company.
7. Members of the Council were flown to the Mackenzie Delta location, where they visited the base camp and a drilling rig so they could see where the men of their community would work, ask questions, and help answer questions at home.
8. Another call for workers was made by a corporate representative in Coppermine. This gave men who were absent from the community earlier or who had changed their minds the opportunity to apply.
9. A community-wide pre-employment course for prospective workers was given by the Adult Education Branch in Coppermine. The general nature of oil work and wage employment was discussed. Some 200 people attended the one-day seminar.
10. An orientation course for supervisors and its drilling contractors was held at the company's base camp in the Mackenzie Delta. The company explained its program and emphasized its commitment to Inuit employment. Two Inuit men attended and participated in discussions. The goal of the course was to motivate those present to support it and to prepare them for potential communication and cultural problems.
11. The actual selection of workers took place. The selection committee consisted of representatives from the company, the Settlement Council, Adult Education and the Coppermine Inuit liaison man.[133]

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[133] *Ibid.* pp. 174-5. The company in question was Gulf Canada.

These measures are credited with part of the success of the program.

> *Recommendation 61: Any employment program must be worked out in close consultation with the representatives of the community or region affected.*

> *Recommendation 62: An atmosphere of trust must be created, even at the cost (if necessary) of a municipal veto on the project.*

5.2.4 *Location of Employment*

One of the major problems, among employers which have little northern experience, is that they *consistently underestimate the bonds between Inuit and their home communities*. Contrary to popular mythology in the south, Inuit feel far more compelled to "touch base" periodically and are hence less "migratory" than southerners are.

Inuit have particularly strong ties, in terms of friends and family, to their own community. Extended stays away from the community are not considered enjoyable.[134]

That was a major problem for the DND program mentioned earlier. There are also specific instances where transport companies encountered this feature.

Nordair ran headlong into this problem with its cabin attendents in two ways. First, Nordair had been fairly successful in recruiting Inuit cabin attendants as long as it based them in Frobisher Bay; however, when the decision was made to transfer them and to base them in Montreal instead, attrition was predictably high.

The conclusion is obvious.

An even more extreme example occurred in Nordair's collective agreement with its cabin attendants. That agreement distributed junior cabin attendants all across the vast Nordair system; northern routes would be reserved by more senior staff. That meant that an Inuit employee joining the company had no guarantee that he or she would be working on local routes, nor that he or she would *ever* be working on local routes until relatively late in their career. This was an obvious and massive disincentive.

Finally, there are cases where Northern employment is closed to Inuit altogether. For example, NTCL'S ships are manned by Seafarers International Union out of southern hiring halls. For all practical purposes an Inuk's chances of working on this Northern job are nil.

> *Recommendation : The basing of northern transport employees should be in the North, and should be as decentralized as possible.*

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[134] Some studies indicate a surprising level of anxiety. For example, at the Panarctic High Arctic Drilling project, "80 or more percent (of Inuit) said that they worried about their wives and children's welfare when they were at the work site." "Commuting Work in the Canadian North", *op. cit.*, p. 13.

> *Recommendation 64 : Collective agreements and other arrangements must allow northern residents full access to employment on northern transport routes.*

5.2.5 *Commuting*

An alternative way of coping with the locational problem is to rearrange work schedules to permit Inuit workers to return home periodically. This has the effect not only of improving morale among employees, but of creating part-time job opportunities for a wider number of people.

This strategy has been analysed in several studies. For example, many of the Gulf Oil employees from Coppermine would choose rotation employment (commuting to the drilling site) over full-time work in Coppermine. A strong majority say they would prefer the fourteen days at work and seven days at home rotation schedule.[135] Studies of other sites suggest similar conclusions,[136] although the final decision should probably be made in consultation with the community in order to take into account local variations and conditions which are site specific.

This may appear, superficially, to be an expensive proposition for the employer. However, that expense must be weighed against a) the cost of importing southern labour, b) the cost of high turnover (as witnessed at Nanisivik and c) productivity associated with morale. A number of employers have concluded that this approach is ultimately the most cost-efficient.

> *Recommendation 65 : Work rotations involving more than 20 days away from home should be viewed with caution.*
>
> *Recommendation 66 : The work rotation should be developed in consultation with the local community.*

5.3 *Training Programs: General*

5.3.1 *Menial vs. Skilled Jobs*

Inuit do not find all economic opportunities equally attractive. Frequently, the jobs which are offered are the least attractive, namely those which are menial or semi-skilled, or which are of uncertain or short duration.

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[135] Charles W. Hobart, Impact of commuting Employment on Coppermine in the Northwest Territories, *op. cit.* pp. 192-193.

[136] *Ibid.* The same conference reviewed Gulf's experience with Native (Indian) employment at Rabbit Lake Sask., which used a similar approach successfully.

Predictably, such jobs have a high turnover rate. The turnover rate in the arctic can be expected to be particularly high, since little attempt is made (by most employers) to foster any sense of identification with one's job. Indeed, it is questionable whether any such identification would even be possible.

The alternative is to offer more interesting jobs; and that usually requires training. In order for that training to be successful, certain distinct features of arctic trainees must be taken into consideration. Those features can lead to negative or positive results, as described below.

5.3.2 *Some Basic Features*

The experience of various training programs has demonstrated certain typical features of arctic trainees. These features are *not universal*; there are exceptions to every rule. However, they do provide a starting point.

a) There is usually a very strong commitment to *one's own community*. Training programs that involve lengthy departures from the community cause considerable anxiety.

b) The above is particularly true when the departure is to an alien environment.

c) This commitment to the community is reflected in other ways. Training programs are more likely to succeed when the *benefit to the community* is unambiguous.

d) Most trainees want to master a skill fairly quickly. The intervening period of apprenticeship is often perceived as a *fetter on one's "self-confidence"*, which must be both short in duration and compensated in other ways.

e) All training programs exist against a backdrop of intense competition by resource companies for potential Inuit employees, largely for PR purposes.

Some training programs have adapted to these realities; others have not. The results speak for themselves.

For example, the Canadian Coast Guard calls its Inuit Employment Project "a tremendous success"[137] (although this is dubious[138]). No doubts, however, can exist as to the success of the training programs such as the one offered by Taqramiut

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[137] *Final Report: Inuit Employment Project, Summer 1980*. Canadian Coast Guard, Ottawa, 1980. p. 3.

[138] The Coast Guard has yet to recruit its first actual Inuit seaman: "As far as seafaring jobs go, the Canadian Coast Guard, despite significant effort, has failed to interest Inuit in serving it." ITC testimony to the Senate Committee on Northern Pipelines, May 18, 1982, p. 26:A. A number of questions can be asked about compatability between life aboard ship and the Inuit lifestyle.

Nipingat Inc. (TNI) in communications (attrition rate among trainees or *employees* is less than 20%) or the Airport Maintainer Training Program (attrition rate among trainees or employees less than 10%) -- both of which have enjoyed very high retention rates.

On the other hand, the Flight Service Specialist Program in Rankin Inlet has been confidentially labelled "a disaster" (attrition 100%). Much of the training conducted by the private sector probably deserves the same label.

The following information should provide some keys as to the features which make the difference. The North has distinct characteristics, and produces distinct trainees. Some of those features are relatively *favourable* to the organization doing the training: work load is an example. Other features are less favourable, and can lead to higher costs.

Some of the recommendations in the following pages will unquestionably lead to expense in a training program; however, these costs must be weighed against other factors. A training program with high attrition is an utter waste of money: it is better to have a more expensive program with a good retention rate than a cheaper one with many drop-outs. 139

Furthermore, it is well worth the investment if the program ultimately produces employees with "staying power": for example, if two cabin attendants decide to walk off the job in some northern location, the airplane might not legally be allowed to even take off, leaving the airline in an extremely awkward situation. Training is an investment; and as with most other investments, it is preferable (and ultimately more cost-efficient) to "do the job right" the first time around.

> *Recommendation 67 : Inuit trainees have particular features which must be taken into account in any training program.*
>
> *Recommendation 68 : Some features lead to extra cost (e.g. for travel); but these costs should be considered worth the investment.*

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139. For example, the Flight Service Specialists Program is not considered a success, despite the fact that it costs the federal government $33,400 for each trainee, over a 60 week period: *Training of Native Northerners as Flight Service Specialists*, Transport Canada.

The *design* of northern training programs, particularly those in areas overwhelmingly populated by native people, should logically be done in consultation with *first-hand authorities*, i.e., the native organizations themselves. In the arctic, that meams ITC and the regional organizations.

However, that objective encounters certain practical difficulties. Native organizations are in no position to provide advice to maximize the impact of such programs.

For example, several government departments offer interesting programs, e.g. the Northern Careers Program, Hire North, the NWT Division of Commerce programs, the National Indigenous Development Program, etc. There are also programs offered through the private sector. However, organizations such as ITC and the regional organizations have no capacity (in terms of finances or manpower) to *monitor these programs and to advise their constituents* accordingly. Similarly, these organizations have no capacity to *relay any expertise* to government and industry on an ongoing basis, which would permit the latter to design more effective programs.

An illustrative case in point was the 1980 program whereby the federal government announced a $10 million incremental fund for native hiring in projects such as pipelines, shipping, etc. Beneficial impacts on Inuit were non-existent. If ITC had had the appropriate resources and channels, it could have advised the responsible minister that the benefits to Inuit would be negligeable, and have assisted in developing a *more effective approach*.

A corollary to this situation is the question of *access* to program design. For example, the Native Women's Association of Canada has succeeded in arranging for and expeditions channel of communications with employment officials, whereas Inuit groups are still negotiating same. Such channels of communication are essential.

Proposed solutions to this problem are curently under discussion.[140]

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[140] The Canada Employment and Immigration Commission has been fully briefed by ITC on this problem, and further developments are expected within the foreseeable future.

A first step is to provede these organizations with a full consultative capacity, along with the ability to plan for the future. It is when these organizations (such as ITC) have this capacity that they will be able to map a *detailed blueprint of Inuit employment opportunities and the specific training programs required for that purpose.*

> *Recommendation 69: Native organizations should have the funding, manpower and access in order to guarantee a full planning and consultancy capacity on all matters of training and employment.*

5.3 3. *Organization*

A further step, which has been suggested by some government officials,[141] would provide native organizations with the capacity to launch *their own* training programs under contract to the government.

To a very limited extent, such training programs already exist. For example, ITC has its own training program for office staff[142]; it is entirely conceivable that such programs could be extended to other skills, e.g. via contract with native organizations to provide transport workers.

However, ITC's experience indicates certain shortcomings which need to be adjusted if any such approach is to work effectively. The following conclusions were reached in the ITC Training Program.[143]

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[141] This has been under discussion in the context of the National Indegenous Development Program.

[142] A full description of this program is found in *ITC TRAINING PROGRAM, First Semester Report*.

[143] *Ibid.*

First, training programs usually presuppose the existence of "adult education" basic literacy-upgrading programs and orientation courses about the world of the wage economy.

Second, advance funding (even on a month by month basis) is mandatory for any small organization which lacks operating capital, but is willing and able to train. The Canada Community Development Program (another CEIC program which has training aspects) does provide advance funding; until recently, other programs such as the Canada Manpower and Immigration Professional Training did not, although that position is subject to change.

The ITC program encountered a multitude of instances of "red tape", which were outlined in the report. One must not overburden the program with too many "designers", checks and balances, etc.

One can capitalize on regional organizations for advice, publicity, contacts and other purposes. The same is true of municipalities.

Funds should be available for initial "scouting" visits by a co-ordinator. Up-front monies for initial internal (i.e. ITC and regional Inuit associations) and interdepartmental consultation, as well as for the preparation of an actual program design should precede the organization's involvement in the training process. This would apply to any small (native or northern) organization attempting their first hands-on experience in developing their own training schemes.

An initial program design and development phase, funded for at least two months before training began (including co-ordinator's travel "in the field"), is important:

a) to ascertain available "educational" resources in each community where training would take place. (e.g. "Adult Education" courses, workshops, supplementary trainers.)

b) to ascertain accessible "educational" resources outside of their communities.

c) to discuss and develop selection and recruitment techniques.

d) to develop practicable comprehensive training plans on site.

e) to determine, clarify and/or set all other necessary guidelines.

A single government department, eg. Native Employment Division CEIC or NWT Department or Economic Development, should allocate all funds necessary to run a given program. The more agencies which fund a program, the more conditional standards, criteria and regulations are rendered applicable and the more complex and untenable the program administration becomes.

Provision must be made for structured workshops, even though transport costs may make this expensive.

Recommendation 70: Native and northern organizations should be assisted in setting up their own training programs.

Recommendation 71: Adult education and other courses should prepare communities for employment and training options in the transport field.

Recommendation 72: Advance funding should be available for training programs.

Recommendation 73: Training programs should not be subject to excessive paper burden.

Recommendation 74: Regional Inuit organizations and municipalities should be involved at the "ground floor".

Recommendation 75: Training programs should provide for an initial design and development phase.

Recommendation 76: Any given training program should have a single supervisory agency.

Recommendation 77: Workshops should be provided.

5.4 Training Programs: Specifics

5.4.1 Market Adjustments

Any training program is an exercise in futility if no jobs are available for the trainees. For example, operation of a bulldozer was (for a long time) almost the only readily available training program; but how many bulldozer operators does a given community need?

The problem is the same in the transport area. At one time, Inuit Development Corporation was seriously studying the feasibility of setting up a program to train pilots; however, the recent downturn in the Canadian airline industry has put many pilots out of work. Northern carriers have many experienced southern pilots to choose from, and hence there is little incentive to promote the training of northerners as pilots.

Similarly, it would be futile to train Labrador Inuit in the use of navigational equipment as long as there are no plans to install such equipment in northern Labrador.

The proper response to this situation is twofold. The first part is that one does not offer to train people for jobs that do not exist.

The second part of the response is to express a commitment to Inuit employment by a form of affirmative action programs, whereby promising trainees are *"groomed" for jobs that are reserved for them*. That is the current approach of the Airstrip Maintainers Training Program, under instructions from Transport Canada's *Arctic Air Facilities Policy*. Admittedly, it leaves the employer in an awkward position in the event of a drop-out; accordingly, this option is available (for the time being) only to large-scale employers. However, this appears to be the *most promising* technique to assure Inuit participation at levels higher than the purely menial.

This approach is also expected to have spin-off effects. By moving a trainee into a higher position relatively quickly, one provides benefits not only to that trainee and to the PR of the operation: one also creates a "role model" who can potentially *inspire other trainees to follow suit*.

In short, it is possible and desirable not only to adjust *in response* to the market; it is possible to *adjust the market itself*.

> *Recommendation 78 : Training programs should correspond to market realities.*
>
> *Recommendation 79 : Large-scale employers should reserve positions to be filled by trainees "groomed" for that purpose.*
>
> *Recommendation 80 : The above technique should be viewed as a method of developing "role-models" within communities.*

.4.2 *Advertising*

In order to make potential recruits aware of training programs, ITC's training program reached the following conclusion:

> "Advertising" is essential. Word of mouth and community radio appear to be the most effective method of communication of the recruitment and selection process. In ITC's experience most candidates applied because they heard about the program in the community where it was offered. Conversely, trainers were aware of candidates aptitudes, past records and potential, by virtue of living in a small community. Written selection guidelines, writtan applications and written references were largely ineffectual.[144]

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[144] *ITC Training Program, First Semester Report, op. cit.*

This necessarily requires close cooperation with local and regional organizations. For example, the fact that the Kitikmeot Inuit Association had never even heard about the Observer-Communicator Training Program suggests a shortfall in communications in the Kitikmeot Region, which in turn would be an inhibiting factor in recruitment.

Transport Canada has recognized this feature, accordingly, it has identified information and coordination with communities as "Objective No. 1" in its 1982-83 action plan.[145] Among a series of specific objectives, the department has identified

- Contacts with counsellors from native communities to seek their participation in meeting departmental objectives;
- Transport Canada's presence on career days in native communities;
- Tours of Transport Canada's installations by native students and counsellors.[146]

Recommendation 81 : Training programs must be "advertised".

Recommendation 82 : Close cooperation should take place with local and regional groups to maximize "word-of-mouth" effects.

5.4.3 *Entry Requirements*

Some government training programs require a certain educational level before candidates become eligible. For example, the GNWT's airport programs usually require a Grade 10 education.

Superficially, that appears to be a reasonable requirement, but when one considers the complaints which have been made about the arctic educational system in the past, one concludes that there are many intelligent and capable youths who may have dropped out before reaching Grade 10. The experience of other native training courses confirms this, as demonstrated below.

At the Collins Bay mine in Saskatchewan, an experimental training program for equipment operators was launched for natives:

> Among those initially selected only half had previous industrial experience, *only a few had more than grade one education, and none had completed grade four.*

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[145] *Indigenous Peoples Program Annual Review and Action Plan.* March 31, 1982. p. 6.

[146] *Ibid.* p. 1

> The consequences of this innovative approach have been striking. Although initially the native employees experienced a slower rate of advancement than did non-natives, they tended to catch up quickly. Once trained they often proved to be at least as good as non-native employees. Natives without prior industrial work experience often were found to be better than those with such experience. Promotions have come as a result, so that now there are native as well as non-native foremen. Native workers are reported to be well-satisfied with this arrangement. This is born out by the fact that currently there are no differences in the turnover rates of native and non-native employees. In 1978 both stood at the astoundingly low figure of 16 per cent per year. Working cooperation between natives and non-natives has been excellent. The policy of hiring natives on an equal footing with non-natives is carefully explained to all new employees, and those who find this disquieting are told to look for work elsewhere. Conflict between natives and non-natives, and criticism of one category by members of the other are reported to be unknown.[147]

Another criterion which is sometimes used as a "substitute" for formal education is "experience".[148] That is a very interesting criterion; but it can also be misleading if this "previous experience" was not of the right kind.[149]

The conclusion from the above is that no degree of writing on a C.V. is an adequate substitute for a personal referral: both formal education and "experience" may be counterbalanced by other factors, which the *home community* could be in the best position to advise about. The Airport Maintainers Training Program, which relies on the *recommendation of municipal councils* (to whom the trainee is ultimately accountable) therefore appears on the right track; and the success of that program bears this out.

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[147] Charles W. Hobart, "Commuting Work in the Canadian North: Some Effects on Native People", op. cit., pp. 7-8.

[148] See, for example, the National Indigenous Development Program.

[149] For example, people with "previous experience" are sometimes those who have the most jaundiced view of what they are doing: in the case of Hire North, "all agreed that trainees from the least acculturated settlements were best: they were better workers, more interested in their work, wanted to learn, and presented fewer discipline problems. The least satisfactory men came from the largest communities in the Territories. Although they usually had prior relevant work experience, they typically showed less interest in learning and a less cooperative attitude on the job. They also returned "hung over" more often than the others from their rest break and took several days to get back on their feet." "Commuting Work in the Canadian North", *op. cit.*, p. 21.

Recommendation 83 : Educational requirements should not bar prospective trainees who would otherwise be promising.

Recommendation 84 : "Experience" may be misleading as the ultimate guide to qualifications.

Recommendation 85 : Wherever possible, the recommendation of the community (e.g. via the municipal council) should be viewed as the single most important criterion in eligibility.

5.4.4 *Location of Training*

Some mention was made earlier of the typical trainees's commitment to his own community. That message was learned the hard way be agencies such as Department of National Defense.

In view of that reality, it is obvious that there will be problems in attracting and keeping arctic trainees at courses in places like Cornwall, Camp Borden or other southern locations. Indeed, even a northern but non-arctic location such as Fort Smith is less than totally desirable as noted by some observers of the GNWT's training programs -- particularly when courses exceed four weeks in length.

The first option is to develop mobile training courses which can be brought into arctic centres, if not into every community itself. This is an option under consideration by the National Indigenous Development Program, and appears promising in other subjects as well.

A second option can be considered for courses which, for some reason or another, are necessarily in the South. That option would provide for *frequent trips* permitting northern trainees to touch base with their own community. The importance of this tool cannot be emphasized often enough; indeed, the successful communications training offered by Tagramiut Nipingat Inc. provides for such trips on a *montly* basis , *even though TNI offers its courses in the North*. Although this appears expensive, its success is worth the cost (in the opinion of the Canada Employment and Immigration Commission). If this approach is useful in the North itself, its importance for trainees in the South becomes even more apparent.

A third approach is as follows. Not all Canadians experience the same anxiety over dislication; on the contrary, some young people from elsewhere in Canada enjoy it. Under those circumstances, it might be more logical to locate various training courses in the North: that would satisfy both groups (or at least a larger number).

An even more desirable solution may be on the horizon: it is the use of electronic equipment to train individuals within their own community. Inuit Tapirisat of Canada is currently involved in research on the use of Telidon for news gathering and dissemination. It is expected that this will lead to other things, such as training packages and a widespread use of the various services (and employment) which computers have to offer. Inuit from Canada, Greenland and Alaska may soon be involved in joint efforts with the help of a dedicated circuit which the Alaskans have proposed. More specifically on point, the Alaskans are assisting Canadian Inuit with negotiations (with a major software designer) for a feasibility study which would include the possibility of computerized training and education packages for the North.

If these efforts are successful, and if the necessary facilities are made available, then that could provide a breakthrough (in conjunction with other electronic apparatus) in assisting on-the-spot training. That step, in turn, would reduce the amount of time required for outside training, and hence could have a significant impact on recruitment and retention of trainees.

> *Recommendation 36 : Training courses should take place in the arctic wherever possible. Mobile training programs should be encouraged for that purpose.*
>
> *Recommendation 37 : Feasibility studies should be undertaken on the relocation of various training programs to the North.*
>
> *Recommendation 38 : The development of training programs by electronics means should be the subject of immediate feasibility studies.*

§4.5 *Levels of Remuneration*

Most Inuit are unenthused, to say the least, about resource companies which move into northern areas before the forthcoming sittlement of land claims. Nonetheless, these companies have offered salary levels in the North which even the most idealistic Inuk would think twice about. This phenomenon has resulted from two factors:

a) The extra "isolation pay" which the companies offer their northern employees, and

b) The premium which companies sometimes pay to obtain token Inuit for PR purposes.

These efforts have completely dislocated northern pay scales. The inflationary impact of major resource projects has been summarized by Dr. Milton Freeman:

> Apart from the disruptive social effects of possibly losing key individuals, there may also be serious economic effects locally and regionally in terms of territorial expenditures needed to offset the expected inflationary effects of the project impacts. There is still a dearth of experienced, capable individuals in these small communities with skills in engineering, building and machine maintenance, in clerical and management tasks. Local housing authorities, local government offices, co-ops, and small private businesses cannot offer

> salaries or hourly rates matching those necessarily paid to all workers on industrial worksites in order to induce southern workers to venture north.[150]

Other employers, such as municipalities and co-ops, have often felt compelled to follow suit in order to offer competitive salaries; the result has been dislocation of pay scales not only in the resource sector, but across the North generally.

This reality must be taken into account by organizations offering training courses. Although it is possible that an ambitious and idealistic trainee might prefer to subscribe to a training program rather than accept one of these higher wage jobs, recruitment of trainees will be difficult if wage levels are *seriously* below those wages. That was part of the reason for the failure of the flight service training program in Rankin Inlet, in which trainees simply quit to obtain higher paying jobs.[151]

One useful example is the Seamanship training offered by Beaufort Environmental Supply Services Ltd. It orignally offered trainees $20/day "pocket money" but found that it had to triple that figure to remain competitive.

That situation does not prevail to the same extent in the rest of Canada. ITC speaks from experience when stating that it is simply counterproductive to tie trainee pay scales in the North to those elsewhere[152]: if the "market pressures" are different in the North, pay scales must be adjusted accordingly.

> *Recommendation 39: Trainee pay scales should be competitive with northern resouce pay scales.*

5.4.6 *Trainers*

There has been some difficulty in finding appropriate trainers. Great care must be taken in selection; otherwise, the exercise will be counterproductive.

This is, for example, a lesson which the Canadian Coast Guard learned the hard way, when it noted that some of its trainers in 1980 happened to suffer from chronic seasickness.[153] The Inuit trainees were unimpressed.

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[150] Direct evidence to the National Energy Board, Arctic Pilot Project hearings, p. 22.

[151] "Training of Native Northerners as Flight Service Specialists", Transport Canada Report.

[152] ITC's own training program, under CMITP, offered a pay scale comparable to elsewhere in Canada. This was not a success; ultimately, pay levels had to be supplemented by the GNWT to bring them closer to northern standards.

[153] "Memorandum: Inuit Employment Project -- 1981", *op. cit.*

The optimal situation is when Inuit are trained by other Inuit. This was done by the Airport Maintainer Training Program, with excellent results. Other observers have suggested that "crash programs" might be appropriate to develope such trainers. The Candian Coast Guard made the following observation about trainers:

> They should also, if at all possible, be able to converse with the Inuit in their own language. How can they counsel if they are unable to communicate?[154]

Recommendation 90 : Great care must be used in selecting trainers.

Recommendation 91 : Inuit trainers should be used wherever possible. Where no Inuit trainers are currently available, crash courses should be undertaken to provide them.

5.4.7 *Initial Training*

The first days and weeks of a training program tend to be critical. If one does not *immediately* counteract the sense of alienation which trainees often feel in that period, the program runs a serious risk of failure.

The Canadian Coast Guard has paid particular attention to this period, and credits this effort with the program's "success".[155]

Recommendation 92 : Maximum attention must be paid to the initial phase of a training program.

5.4.8 *Personalized Attention*

The Canadian Coast Guard adopted a formula of one trainer for every three trainees, and credits this low ratio with a large part of the program's "success".[156] Taqramiut Nipingat Inc. (TNI) uses a slightly higher ratio, i.e. one to five. It is generally felt that this kind of personalized attention is essential in counteracting the "culture shock" which many trainees apparently encounter in their courses.

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[154] *Ibid.*

[155] *Final Report -- Inuit Employment Project, Summer 1980.* Canadian Coast Guard.

[156] *Ibid.* In the case of the Beaufort Seamanship Program, it is 1-4.

TNI has also reached a number of other conclusions in developing a "personalized" training program. For example:

- Training is done by full-time professional trainers, as opposed to existing staff who are often distracted by ongoing responsibilities.

- Great care is taken in the selection of *trainees*. An addition to that of TNI, the experience of the Inukshuk Project (now the Inuit Broadcasting Corporation) has shown that the successful selection of trainees depends on the use of a *community development officer* (as opposed to a professional journalist or teacher) to supervise the selection, and on close consultation with the home communities.

- Close attention is paid to the provision of adequate housing, salary and other personal amenities. Serious problems may be expected to result when these are neglected.[157]

Similar conclusions were reached by the Airport Maintainer Training Program and the Observer-Communicator Training Program. In fact, these Programs vest responsibility for the selection of trainees in the *municipal council*, to whom the trainee must report. The category of "Amenities"; the Beaufort Seamanship Program assures for example, that Northern food is available to the trainees.

Recommendation 93: A trainer-trainee ratio of 1-5 or less is probably essential to produce the desired results.

Recommendation 94: Training should be done by full-time trainers.

Recommendation 95: Trainees should be selected in consultation with communities, the local community development officer, and/or the municipal council.

Recommendation 96: Housing and other amenities deserve high priority.

5.4.9 *Course Content*

In the case of many southern training courses, one would expect that a very heavy work load would be a deterrent to trainees. In the North, experience suggests that the *reverse* is true.

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[157] "Journalism Training Proposal", Inuit Tapirisat of Canada, 1982.

This is a classic example of the familiar proposition that Northern training conditions do not necessarily follow the standards of elsewhere. TNI's strategy has been summarized by ITC:

> Students are worked very hard. The experience has been that, far from wilting under pressure, the Inuit students thrive under hard work. In one year, TNI produced graduates on a par with those of a three-year community college program.[158]

A similar phenomenon was witnessed by two government programs. While the Airstrip Maintainer Training Program was conducted at Coral Harbour, it was noted that when a large part of "*off-hours*" were reallocated to *work*, this was not only accepted but enjoyed. The Canadian Coast Guard had problems *finding enough to keep their Inuit trainees occupied*, and finally recommended that more "hobby material" be brought aboard in order to keep trainees occupied during *inevitable* off-hours.[159]

Other native hiring programs have encountered the same phenomenon.[160]

On reflection, this feature should not be surprising: it is entirely consistent with the fact that more trainees are anxious to *master* their skill as quickly as possible, and are prepared to go to considerable lengths as long as they *see "the light at the end of the tunnel"*.

There are corollaries to this approach, which TNI has applied to its course content:

- Immediate, day-one "*hands-on*" *training* has proved extremely important. While students must have a strong theoretical background or they cannot hope to become proficient in their craft, experience has demonstrated the need for *immediate application* of theoretical knowledge.

- Students are given an early chance to "show their stuff" and encouraged to excel.[161]

The same conclusion was reached by the GNWT'S airport training programs, and the Beaufort Seamanship program. The latter places great emphasis on making all its exercises as "realistic" as possible. On the other hand, the Observer-Communicator Trainig begins with three weeks of theory; this is considered an unfortunate necessity, but some officials still hope that an alternative may eventually be found. The heavy emphasis on theory is also suspected of having been one of the liabilities at the unsuccessful Rankin Inlet Flight Service Specialists Program.

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[158] *Ibid.*

[159] "Memorandum: Inuit Employment Project -- 1981", from L.C. Humphries of Canadian Coast Guard, April 15, 1981. In the case of the Beaufort Seamanship Program, the recourse was to bombard the trainees in off-hours with athletic programs.

[160] One example is the Hire North program, which has a large Indian component: "Most felt that eleven hours was the ideal length of the work day and that it was essential to camp moral to work seven days a week." The work schedule was 30 days on, 7 days off. See "Commuting Work in the Canadian North", *op.cit.*, p.23.

[161] "Journalism Training Proposal", *op. cit.*

Finally, there are certain so-called "cultural" features which must be taken into account. For example, the Coast Guard noted that there appeared to be some distress, among its trainees in the Engine Room, over the cramped quarters and high noise levels.[162] In view of the trainees' background, this is not unduly surprising.

Another feature which inexperienced southerners almost invariably misinterpret is the use of questions. Elsewhere in Canada, the asking of questions is often considered a sign of alertness; in the arctic, the situation is the reverse. Teaching methods must be adjusted accordingly; this was understood by the organizers of the Airport Maintainer Training Program, who credit part of their success to this.

A third useful feature is the utility of *visual* materials. For example, the Coral Harbour session of the Airport Maintainer Training Program made very extensive use of slides, and this was found to have positive effects.

Recommendation 97 : A very heavy work load is not only acceptable, but probably preferable.

Recommendation 98 : "Hands-on" training should begin almost immediately.

Recommendation 99 : Trainees should be given the opportunity to "show their stuff" as early as possible.

Recommendation 100 : Conditions in training situations should not be radically inconsistent with the trainee's lifestyle.

Recommendation 101 : Certain teaching methods, such as the use of questions and answers, or the use of slides, need to be adapted to different northern cultural patterns.

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[162] "Memorandum: Inuit Employment Project -- 1981", *op. cit.*

5.5 *Community Orientation*

The most successful training and employment programs have been those in which trainees and employees could *see the benefits* which would accrue to the community.

The amorphous ingredient called "local pride" has been credited with a large part of the success of programs such as the Observer-Communicator Traning Program, TNI'S program, and the program to tain municiple administrative staff. Similarly the Beaufort Seamanship program emphasizes its "roots" in an ancient Maritime tradition.

In many cases, this local "pride" is reinforced: not only do the above positions *benefit* the community visibly, but they are also *accountable* to the community. Municipal airports in the NWT, local radio stations and municipal governments are all subject to community control in one way or another. Accordingly, Inuit who work there *are working for themselves*.

It will still take time before that situation becomes more widespread, and Inuit perceive that they have a large stake in other enterprises. However, one can estimate that wherever Inuit have a large degree of involvement in the ownership and control of an enterprise, the enthusiasm and dedication of the Inuit trainees and employees is likely to increase proportionately.

> *Recommendation 102 : The community benefits derived from a training program or employment program must be demonstrated and emphasized.*
>
> *Recommendation 103 : In the long term, it should be recognized that programs will work best when the enterprise is subject to Inuit ownership and influence.*

5.6 *Participation in Corporate Ventures*

5.6.1 *Introduction*

It has been observed that it is essential for Inuit to participate in the economy of their area.

That means not only in the position of employees, but also as partners in the economic ventures themselves. The same principle is applicable to transport enterprises. This can occur through ownership of shares in transport companies, in "joint ventures" (whereby Inuit interests join with carriers for specific projects) and other kinds of agreements.

Some experience has already been developed in these areas. Inuit-owned carriers include Air Inuit and the New Nurasi Air. A format for joint ventures is being developed for tourism at Ellesmere Island's proposed national park. These experiences will be discussed in turn.

5.6.2 *Equity in General*

The North is one of the few areas in Canada where the local population relies so heavily upon enterprises which are monopolies, which are privately owned, and which are owned by residents from outside the region. It is comparable to the scenario which would occur if Toronto's only lifeline to the outside world were in the hands of Hughes Airwest or of Freddy Laker.

In most of Canada, it was considered essential to the public interest that consumers should have access to not one but *two* publicly-owned carriers, CN and Air Canada. No such "public interest" has been identified in the North.

Accordingly, arctic transport is generally *controlled by private non-residents.* No one has advanced arguments proving that this approach is producing results which are either inherently good or bad. However, there are moments of public apprehension concerning a carrier's *commitment* to an area. For example, when the President of Labrador Airways threatened to *shut down passenger service* in northern Labrador if he did not receive the subsidy he wanted,[163] public confidence was put to the test.

Events such as these have reinforced the view, expressed earlier, that Inuit *must have a stake* in these enterprises -- if only to create greater *bonds* between the carriers and the area serviced. Since these carriers are privately owned, the first thought is the acquisition of shares.

Inuit have had some experience in the ownership of transportation companies through major holding companies such as Makivik Corp. and Inuit Development Corp. (now called Nunasi Corp.).

There are three main objectives in the ownership of shares in a company: *influence, information, and money.* Equity means influence, because shares usually vest voting rights and possible control of the corporation. They provide information, since one may use one's shares to elect a person to the Board, who is then privy to corporate information. They provide money through dividends.

The Inuit experience with equity has usually been with wholly-owned corporations.

In cases where shares are not wholly-owned by any one person or corporation, then it is possible for them to be divided between majority and minority interests. In the case of Nordair, for example, Makivik Corp. waged a long but unsuccessful battle to obtain a minority interest.

In the case of minority interests, one must analyze the degree to which they provide the three desired features of influence, information and money. Minority interests are no guarantee of influence. At best, they provide a *possibility* of a seat on the Board. This seat is usually not guaranteed; and even if it is obtained, its main purpose can be little more than *inside information* rather than any degree of *control.* Minority interests are usually an unsatisfactory way of exercising influence on corporate policy, except when the other shares are so *widely held* that they cannot coalesce into a counterbalancing voting block. That is not the case with northern carriers: their shares are not widely held, and therefore a minority shareholder could not be expected to have any great influence in their corporate policy.

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[163] This statement, made January 12, 1982, was quoted in *Kinatuinamot Ilengajuk*, Nain, January 22, 1982.

The "inside information" provided by a minority interest may not be significant if the shareholder does not succeed in electing anyone to the Board. In such a scenario, the shareholder would be entitled primarily to documents such as Annual Reports[164] -- which are not necessarily very enlightening. His position is improved if he can elect someone to the Board; but that is less than a sure bet, particularly when other shares are "closely held".

The final feature is money in the form of dividends. In this case, there is at least the argument that it is right and proper for a community (via its co-op, municipal government or local development corporation) to own some shares in the carrier because this *permits part of the profits from that community to be reinvested* in the community via dividends.

Theoretically, it would therefore appear that Inuit should strive first for *majority* control of the shares of carriers; and if that is impractical, they should obtain at least a minority interest. This is "theoretical" because few carriers are anxious to sell their shares to Inuit (particularly a controlling interest), and few Inuit groups are in a *position to buy*.

That leaves a limited number of options:

a) The creation of new carriers with proceeds of land claims negotiations (or on credit against those proceeds);

b) Purchase of shares in existing carriers with those same funds;

c) Use of techniques *other than equity* (e.g. joint venture) as the vehicle for participation.

Each of these options will be examined in turn.

Recommendation 104: The credibility of the transport system hinges, in part, on Inuit participation. This is essential to reinforce the carrier's commitment to the locality and region.

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[164] There has been substantial jurisprudence on other rights which the minority shareholder can invoke, but these recourses usually involve considerable awkwardness.

5.6.3 *Creation of New Carriers.*

Air Inuit and Nunasi Air are examples of airlines which "began from scratch" in recent years. Their purpose can be seen in the following comments on Nunasi's role in the Keewatin:

> The objective of the Inuit Development Corporation, owner of Nunasi Air, is to promote the economic self-sufficiency of the Inuit people. Nunasi Air will do this in two ways. As a viable business it will provide new skill learning and job opportunities as well as earn a profit for the Inuit. More important, it will provide a competitive presence in the Keewatin transportation system to ensure the best possible rates for services.[165]

Is this objective feasible?

There is a continuous jockeying for routes in the North, and it is not unusual for airlines to "suddenly appear" in an area. Northwest Territorial Airlines took over a number of routes in the Kitikmeot Region upon the demise of Northward Airlines; and even the Air Transport Committee was stunned by the speed with which Calm Air took over Transair's Keewatin routes.

In authorizing the takeover of a route or the creation of a new route, the CTC considers a number of factors, including the "track record" of the airline. That does not mean, however, that the company necessarily has any *capacity* to provide the service at the time it applies for authorization. The company may be submitting its application on the basis of a mere *option* on airplanes plus an aggressive management scheme. Indeed, at the time of submitting its application the company may have no planes or pilots at all: it may be merely an office with some ambitious people in it.

"Inexperience" can be a drawback in applying for CTC authorization, but it can be compensated by other factors. For example, the new company may have hired experienced managerial personnel; it may also have other advantages, such as good contacts with the communities. In the opinion of Tagak Carley, the *key* factors were a high degree of professionalism in staff and sound capitalization.[166]

Accordingly, there is no overwhelming obstacle to Inuit establishing their own carriers to serve their communities. This is precisely what was done in the case of Air Inuit.

Recommendation 105 : The creation of new airlines by Inuit must be considered a viable option.

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165. *Nunasi Air Economic Analysis*, R.S. Wallace Associates, May 1982. p. 1.

166. "When Lambair went bankrupt, IDC felt that there was a business opportunity of limited duration available to it, through which it could fulfill its mandate to its shareholders to provide competition and stability into the market with a well capitalized and professionally run air service." Tagak Carley's presentation to the Air Transport Committee, during Nunasi Air's licensing application, May 30 - June 2, 1982.

5.6.4 *Acquisition of Existing Shares*

There are some instances of Inuit holding a part interest in transport enterprises: for example, Makivik Corp. holds a 50% interest in Héli-Quebec, a helicopter company.

There is also discussion of acquistions in the area of sealift. In 1979, the federal government considered "privatizing" operations such as the Eastern Arctic Sealift (serving primarily Northern Quebec and Baffin), operated out of Montreal by the Fleet Systems Branch of any such takeover should be by a representative *northern* company, and suggested the Inuit Development Corporations; the takeover of *management* and *shares*, however, could be considered as two *separate* operations. No decision has yet been reached by the Inuit, and IDC is currently studying the options propsed In the private sector, the purchase of shares in existing carriers is complicated. For example, Inuit Development Corp. negotiated with Lambair for that purpose, but no agreement could be reached on a pricing arrangement. In that case, the carrier was holding out for a certain price even though it was already insolvent; when it did not receive it and negotiations fell through, it gradually went bankrupt. This suggests that some carriers, at least, have an unrealistic appraisal of the value of their own shares.

The reluctance of carriers to encourage Inuit equity can be mystifying. Many northern carriers are chronically undercapitalized, with a large part of their revenue going directly to debt servicing. In Tagak Carley's words,

> Inuit have become increasingly worried about the instability of air carriers that were supposed to serve their convenience and necessity. Inuit are tired of operators who provide poor service, or high prices because they are undercapitalized or poorly managed. More importantly though, Inuit, when Lambair went bankrupt, were faced with the threat of a monopoly, and may I make it quite clear to the Committee that the Inuit will not tolerate a monopoly in air transportation in the Keewatin. Frankly, we are tired of bailing out undercapitalized operators by paying exhorbitant fares.[167]

Recommendation 106 : Existing carriers should consider the possibility of negotiating part ownership by Inuit organizations.

5.6.5 *Joint Ventures*

A "joint venture" is a contractual agreement whereby partners get together for some specific enterprise. It does not usually involve the issue or reorganization of equity; instead, the rights and obligations are set out in the contract. This format

> also provides greater flexibility in capitalization and profit sharing than is possible with the corporate form. A partnership agreement may provide the first $50,000 of

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[167] Presentation to ATC, *op. cit.*

> profits be divided one way, the next $100,000 in another fashion, and the excess in still a third way. Potential losses can be selectively distributed among some partners for tax purposes, while all can share in profits. The timing of profit distributions and the ration can be changed at any time without altering the capital structure of the organization. Several tiers of voting rights are also possible which are not tied to capital contribution or profit share (thus, for example, enabling a developer with a small capital contribution to control a venture largely funded by others)".[168]

There are limitless variations on joint venture agreements; however, they fall into two main categories: "general partnerships" and "limited partnerships". General partnerships are those in which all the partners share in decision-making, profit and losses. Limited partnerships are those where only one partner does the managing (and is logically called the "managing partner"); the other partners in the enterprise have no managerial role, but also have *limited liability* for losses: they are not liable for any *more than they contributed* to the agreement.

The use of joint ventures is rare in the North. Major consortia, such as the Arctic Pilot Project, have usually chosen to incorporate and to issue shares to their participants.

There was even less thought, until recently, of joint ventures with Inuit organizations.

However, that pattern is changing. The change began when government officials agreed that transport megaprojects such as pipelines should provide for native participation in equity. That principle was then extended into other aspects; for example, the Norman Wells pipeline would, according to the Minister of DIAND, "spawn the growth, through joint ventures, and other business arrangements, of viable native enterprises which will provide jobs and an economic base well into the future."[169] In point of fact, the private sector did indeed respond, and not only in this instance;[170] this approach to participation appears to be gaining acceptance for non-renewable resource projects generally, both in theory[171] and in practice.[172]

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[168] This format is often found in real estate developments. Quotation from Lewis M. Goodkin, *When Real Estate and Home Building Become Big Business*. Cahners Books, Boston 1974. p. 525.

[169] Speech to the Standing Committee on Indian & Northern Affairs, March 30, 1982. p. 13.

[170] "I understand that (the company) Esso Resources Canada awarded 19 out of 20 construction contracts last year to northern businesses. In addition, they are negotiating a joint venture company with the native organizations to participate in the Norman Wells Development." John Munro, speech to the Empire Club, Toronto, April 1, 1982. p. 37.

More recently, this thinking has spread into other economic activities, including those unassociated with large resource projects.[173] There was therefore little surprise when Parks Canada developed an embryonic joint venture agreement for the development of transport-related facilities and accomodation of visitors to the proposed national park on Ellesmere Island.

This agreement touches many of the same features as that of Esso Resources. In order to fully integrate the community of Grise Fiord (on Ellesmere Island) to the park development process, Parks Canada has committed itself[174] to the following points:

- Parks Canada will be transporting tourists to the park.
- The local co-op will be invoved in design of the tourist "Vacation Package".[175]

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[171] The Hon. John Munro had the following comments on the position of the *B.C. and Yukon Chamber of Mines* in his speech to that body (May 3, 1982): "I'm aware of your willingness to consider native peoples' concerns, especially your support for the settlement of land claims. I'm aware of your position, and your positive action when it comes to joint ventures and training programs with native peoples. I'm particularly interested in your continuing input on these issues. . . ." p. 17.

[172] In the same speech, the Minister praised similar endeavours by Amax at its Macmillan Pass project. Senator Jack Austin, in pointing to the precedent of Esso Resources, said that "this is the operational pattern we will require under all the new agreements in the Canada Lands," Speech of June 17 to Canadian Club (Edmonton), *op. cit.* p. 16.

[173] Without referring specifically to "participation", the Hon. John Munro made the following comments about economic priorities: "In the critical area of (native) economic development, we have shifted the emphasis from high-profile, large-scale projects to a reserve and local community-oriented level, better suited to community needs, capabilities, and resources. . . . It is our conviction that integrated small-scale economic development -- development which focuses on existing or clearly viable future projects -- is absolutely essential if we wish to achieve sustained economic growth at the community and band level.

An added advantage to this approach is that further social and cultural disintegration is avoided and native self-reliance is consequently enhanced." Speech to the Standing Committee (March 30, 1982), *op. cit.* p. 4.

[174] This commitment is found in the "Memorandum of Understanding for the Establishment of a Reserve for a National Park on Ellesmere Island" between the Government of Canada and the Government of the Northwest Territories, February 25, 1982.

[175] Agreement section 22.

- Parks Canada shall offer to contract the development and the maintenance of facilities to local residents or organizations. Parks Canada shall, for a three year trial period, also offer to contract any visitor and interpretive services on a similar basis, after the development and implementation of an appropriate training program for local people.[176]

- Goods and services will be purchased, whenever "acceptable" according to a "standing offer" from local interests.[177]

- The requirement for local labour shall be written into contracts for purchasing.[178]

- Employment positions "will be staffed, whenever possible, from within the northern labour market";[179] and detailed provisions are provided for that purpose.[180]

- Training programs (with salary) will be provided to local residents for guide positions.[181]

- Special attention will be paid to the training of managerial staff to cope with local conditions.[182]

- Information will be distributed locally (and in the local language[183]) concerning jobs [184] and business opportunities.[185]

- Employment will be on a rotational basis in accordance with local preferences.[186]

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[176] Agreement section 17.

[177] Appendix C section 2 (iv).

[178] Appendix C section 1 (viii).

[179] Appendix C, section 1 (i).

[180] Appendix C, sections 1 (ii) - 1 (v).

[181] Agreement section 16. See also Appendix C section 1 (vi).

[182] Appendix C section 4 (i).

[183] Appendix C section 2 (iii).

[184] Appendix C section 4 (iii).

[185] Appendix C section 2 (iv).

[186] Appendix C section 4 (iii).

This kind of scenario is consistent with the experience of various employers.

Should this approach be transposed into other transport enterprises? In *principle*, the approach appears to be an ideal way of involving the local population in an entreprise where equity was obviously inappropriate; indeed, it provides benefits (such as jobs and business opportunities) which equity could never have provided.

In practice, one can visualize some reluctance among certain carriers. There may even be some who argue that any such endeavour smacks of "affirmative action", or indeed that such practices are "inefficient" and hence violate the spirit (if not the letter) of the *National Transportation Act*.

Such arguments are not convincing. A strong *economic* commitment to an area can only *enhance* a carrier's image of *overall commitment* and dedication to its clientèle. That factor, in turn, is useful to a carrier in any CTC proceedings. Furthermore, it seems only fair that the benefits reaped from a particular area should be reinvested, to the maximum extent possible, in that area.

Finally, there is now general acceptance for the proposition that new developments (including transport developments) which affect northern communities should be preceded by a *social impact assessment*. This means that various projects are no longer endorsed simply on some blind notion of "development for its own sake": if a project is to proceed, public policy demands not only that harmful effects should be avoided, but also that the maximum beneficial spinoff should be sought in each case. The promotion of joint ventures with Inuit communities would be consistent with this purpose.

> *Recommendation 107 : Whether under the auspices of a social impact assessment or otherwise, every transport project should be evaluated for its spinoff benefits to the community.*
>
> *Recommendation 108 : Agreements should be negotiated, whereby transport projects reinvest local income in local goods and services.*

5.6.6 *Joint Administrative Features*

A feature of the joint ventures described above which deserves special attention is that of joint management of certain endeavours. Interesting examples can be found in both the private sector and the public sector.

In the private sector, the Amax mine is a case in point:

> In the Macmillan Pass area, Amax of Canada has committed itself to an open planning process in the development of its Mactung Project. This will allow interested parties, including the native people, to provide imput during the planning stage.[187]

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[187] John Munro's speech to the B.C. and Yukon Chamber of Mines, *op. cit.* pp. 23-4.

The Parks Canada proposal is committed to local participation *beyond* the planning stage, right into the management of the entire operation.[188] A number of options to implement this commitment are under review.

> *Recommendation 109: In the long term, Inuit participation can be foreseen from the planning stages to the administration stages. Governmental and corporate policies should gear up accordingly.*

PART 6. ENVIRONMENTAL EFFECTS

6.1 *General*

Due to discussion over the past decade, there is now a general appreciation of the fragility of the Arctic environment, and a growing appreciation of the ecological impact of various transport proposals. It is not the purpose of this paper to repeat the information which was submitted on transport modes such as pipelines (e.g. *The Mackenzie Valley Pipeline Inquiry*)[189] or tankers (e.g. the National Energy Board hearings into the Arctic Pilot Project). That information has been exhaustively documented elsewhere.

Instead, the following pages will briefly summarize the points to "watch out for" in any transport enterprise. The discussion will not concentrate on pipelines (which do not appear imminent) or on airstrips (whose impact is considerably smaller); instead, it will focus on shipping and, to a lesser extent, on related road facilities.

6.2 *Basic Philosophy*

There is no question that transport projects can take on proportions which are extremely significant from an ecological standpoint. Aside from the well-known case of pipelines, shipping is already headed in that direction: it is estimated, for example, that there could be 1000 transits of the Northwest Passage by the year 2000.[190]

Both the Inuit culture and economy depend upon the integrity of that environment. Its cultural significance should be fairly obvious; that importance is reinforced by the fact that the Inuit culture is inextricably bound to hunting. The environment also has profound economic importance: hunting (despite popular mythology in the South) provides a viable livelihood to more arctic residents than any other activity, and its ongoing economic importance has been monitored in a number of reports.[191]

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[188] Agreement section 19.

[189] Also called the Berger Inquiry.

[190] See "Overview of the Future of Marine Transportation in the Arctic", *Inuit Today*, April 1981, p. 46.

[191] For example, a number of studies were presented in evidence at both the Arctic Pilot Project hearings and at the Mackenzie Valley Pipeline Inquiry.

From an Inuit perspective, environmental disruption is more than the aesthetic tragedy which it would be in the south: it can constitute economic and cultural suicide.

Inuit therefore have a large vested interest in any project which could potentially have ecological repercussions. That policy was summarized by ITC President John Amagoalik:

> Inuit give a high priority to the strengthening of the renewable resource sector of the northern economy. In seeking to ensure that wildlife resources continue to provide Inuit with both employment and income, we are, in essence, seeking to secure the long-term health of our communities and our way of life. From our point-of-view, the present crisis in land and wildlife management has been precipitated by the rapid development of northern resources by outside interests. At the heart of the matter lies widespread concern, shared by Inuit across the North, that the present abundance of wildlife resources will be transformed within decades into an avoidable scarcity.
>
> The NWT Science Advisory Board tells us that fish and wildlife in the NWT could provide for the protein needs of double the native population there. Faced with a vast array of ongoing and planned industrial activities, Inuit fear that we may very quickly lose the opportunity to strengthen the North's renewable resource sector. We have argued before a similarly vast array of assessment panels and public inquiries that this opportunity must not be lost. Despite these efforts, the overwhelming focus of northern development planning has continued to rest upon large-scale capital-intensive and nonrenewable resources projects . . . . Concurrent with the government-encouraged northward advance of industrial development, the appropriate jurisdictions have failed to establish a parallel land management and conservation strategy.
>
> Inuit involvement in wildlife research management and control, is of course, essential. As the traditional and current user we recognize that the communication and perceptual differences between the users and the present managers need to be overcome. In seeking a greater role in these matters we are optimistic that this gap can be narrowed.
>
> Moreover, we seek to be involved in the regulation of other competing land uses to ensure that the development of this sector takes place at all. Earlier comments with respect to the need for conservation and land management strategies has particular relevance here, for Inuit are also seeking to establish these strategies through claims negotiations. Not only is land claims settlement needed to clarify the rights and title Inuit possess, but it is also essential for local and regional planning purposes.[192]

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[192] Presentation to the *Symposium on Natural Resources Use and Native Rights in Canada* (submitted by G. Thompson). Canadian Society of Environmental Biologists, January 5, 1982. pp. 51, 54.

From an environmental standpoint, there are therefore three aspects of transport which Inuit must participate in: monitoring, planning and regulation. The question of regulation will be dealt with later in this paper. The following section indicates, to some extent, the degree to which Inuit have already perceived some environmental problems,[193] and the resulting necessity for future planning.

> *Recommendation 110: The serious economic and cultural impact, on Inuit, of environmental degradation, must not be ignored or underestimated.*
>
> *Recommendation 111: The potential for ecological degradation must be countered by proper processes for monitoring, planning and regulation.*
>
> *Recommendation 112: Inuit must be involved in the decision making aspects of these processes.*

6.3 *Shipping*

6.3.1 *Oil Spills*

There have already been several books, television programs and other high profile works which have sensitized the public to the dangers of oil spills in the Arctic. Inuit cannot currently endorse *any* tanker proposals for the Northwest Passage; indeed, Inuit have opposed the Arctic Pilot Project (liquified natural gas) *partly* because the latter was potentially a "pilot" for even more dangerous cargo.[194]

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[193] In the case of APP, Dr. Milton Freeman commented as follows: "The direct testimony of community spokespersons speak of the following concerns: the importance of hunting to community life; the desire that hunting continue into the future; the negative impact of APP on the long learning process required to become a hunter; the importance of families periodic return to the land; the importance attached to country food; the disruption caused to animals from increased ship traffic; the effects of ice-breaker activity on hunter movement and safety; the inability of communities to withstand negative social impacts associated with APP; the inability of Inuit to benefit from APP at the present time; the impacts associated with progressively greater industrial activity expected to follow APP; the destruction of the Inuit way of life following APP initiation." Direct evidence, *op. cit.*, p. 8.

[194] There were, of course, many other reasons as witnessed by the hearings.

One DIAND document makes the following ominous prediction:

> *The projected level of shipping over the 20-year period could be expected to result in at least one major oil spill* and possibly one LNG-fire, attributable to tanker accidents, somewhere in the Northwest Passage. The extent of oil spill damages would depend on the location of the accident, the amount of oil released, the season, the disperson by wind and currents, the clean-up response time, and the capabilities of the clean-up equipment used.
>
> Oil spills in winter would be restricted initially to the ship track, but residual oil would be distributed by winds and currents when ice cover broke and melted. *A large oil spill in Lancaster Sound would be very serious biologically and would also have serious economic repercusions in the communities.*
>
> Although LNG is not a pollutant, *there is a slight possibility that an LNG tanker accident could result in an extensive plume of ignited natural gas. This could be lethal to colonies of birds or groups of mammals if the incident occurred close to them.*
>
> Effective monitoring, control, and support of year-round arctic shipping would result in increased costs. These costs would have to be met by the ship operators, the cargo owners, the tax payers, or by some agreed combination of these as determined by government. *The capabilities and limitations of available pollution clean-up equipment and the technology applicable to arctic clean-up operations are important considerations.*[195]

That is simply and categorically unacceptable.[196] It was considered unacceptable along the British Columbia coast (see the West Coast Oil Ports Inquiry); and there is no reason why it should be more acceptable in the even more sensitive North.

There has already been one oil spill in the Arctic. Although it occurred on a small scale, it demonstrates graphically the problems associated with shipping.

The ship *Edgar Jourdain* was wrecked on September 20, 1980, 300 metres from shore at Hill Beach, N.W.T. It was not a tanker, but a cargo vessel, however, it carried some 100 tons of diesel fuel. The following summarizes the "clean-up" of the *Edgar Jourdain*:

> . . . despite the fact that the vessel was seriously damaged, there was, at first, no report of an oil spill. . . . The agency responsible for marine accidents is the Canadian Coast Guard, under the Department of Transport . . . .

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[195] *The Lancaster Sound Region 1980-2000*. Dept. of Indian Affairs and Northern Development. H.J. Dirschl, ed., 1980, p. 57. Emphasis added.

[196] See also ITC, BRIA, LIA Brief to the Special Senate Committee on Northern Pipelines.

> Early in the afternoon of 21 September 1980, a report came through to the Canadian Coast Guard Emergencies Office in Ottawa that fuel oil was leaking from the *Edgar Jourdain*. The leak was described as "small patches and slicks extending over an area ¼ mile square," but the exact extent has not been determined. . . .
> Subsequent helicopter surveillance of the wreck reported no trace of the oil sheen by the third day. By 24 September, however, it was considered very likely that the oil remaining in the vessel would be released into the water in contravention of the Arctic Waters Pollution Prevention Act, and the owner and its insurance representative were requested by the Canadian Coast Guard to specify what actions they intended to take to prevent oil pollution.
>
> But although insurance inspections had been made, the company would not state its intentions about clean-up arrangements until the insurance surveyor's report was in. In these incidents, the companies contracting for clean-up like to see payment on the table and owners in turn are understandably reticient to comply with clean-up regulations until they have a written commitment from their insurance companies. . . .
>
> Besides the company and its insurance and legal representatives, these included the Canadian Coast Guard (CCG), the Department of the Environment (DOE), DOE's Environmental Protection Service (EPS) in Yellowknife and Ottawa, the Department of Indian Affairs and Northern Development (DIAND), and the Arctic Waters section of DIAND's Water Resource Division, based in Yellowknife.
>
> Discussions, letters, intra- and inter-departmental memos, and indecision stretched from late September 1980 to mid-June 1981, with a noticeable hiatus when the whole issue was shelved after winter freeze-up to be resumed in late March 1981, in response to an early summer ice break-up.
>
> The controversy centred on the question of how to dispose of the ship and the petroleum products it carried. It was determined that damage to the vessel was serious and that it was the responsibility of the shipowner (and its insurer) to arrange for the disposal of the contents and wreckage of the *Edgar Jourdain*. Beyond that there was little agreement. . . .
>
> The fuel burn-off began on 15 June 1981 -- almost nine months after the grounding. . . .[197]

The topic of the *technical* ability to clean up oil spills has been discussed in a multiplicity of documents. There have been television shows; there have been letter-writing campaigns over an assortment of dubious experiments such as the dipping of polar bears in oil. However, the most *telling* comments are those made during the *Edgar Jourdain* incident *by government officials themselves:*

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[197] Wendy Finan, "The Hall Beach Incident", *Northern Perspectives*. Vol. 9, Nos. 4 and 5, pp. 1-4, 1981.

I have great concerns over the inordinate amount of time taken by your Department (Department of Environment) to respond to Jourdain Navigation's request for guidance in disposing of the grounded vessel and the petroleum products on board.

The six-week period between our initial indication to you on 31 March, 1981 of the settlement of Hall Beach comments (burn diesel (and) initiate cleanup soon) and the relay of these to Jourdain representatives by letter dated 11 May 1981 . . . is unacceptable. This delay coupled with the six-week lead time required by your office to issue an ODCA permit, not only gives credence to the settlement's concern over the lack of action . . . but could result in open water around the vessel prior to the owner's having a permit to take action, thus increasing the possibility of diesel (fuel) escaping to the marine environment.

E.T. Ladouceur
Regional Co-ordinator
DIAND Arctic Waters Section
May 22, 1981.[198]

This incident does not auger well with our department's attempts to play a meaningful and effective role in the eastern Arctic. Let's do better next time.

W.J. Bryant
District Director,
Environmental Protection Service (EPS)
Yellowknife Branch
May 26, 1981[199]

EPS, as is to be expected, are going off in all directions, with EPS Hull not knowing what its region and district people are doing.

M.S. Greenham
Chief of Emergencies
Canadian Coast Guard
June 15, 1981[200]

With comments such as those, little further explanation is required for Inuit opposition to tanker traffic. Indeed, *all* shipping under hazardous northern conditions must be carefully considered. The *Edgar Jourdain* was, after all, only one of many vessels (of all descriptions) which ply northern waters under inauspicious circumstances.[201]

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198. Letter to W.J. Bryant.

199. Letter to N. Tywoniuk

200. Memorandum to the Commissioner and Deputy Commissioner, Canadian Coast Guard.

201. The case of the sealift vessel which was apparently so rusted that its derek fell into Ungava Bay (while unloading at Kuujjuak) was mentioned earlier.

Furthermore, the *credibility* of the entire system of monitoring, planning and regulating environmental conditions has been put to the test. It is no surprise that Inuit are dissatisfied with being *outside that process*. *Public confidence* among arctic residents are not likely to improve until those same residents are an *integral part of the process itself*.

> *Recommendation 113: Tanker traffic cannot be considered acceptable, under present technical and administrative conditions.*
>
> *Recommendation 114: All shipping must be scrutinized with the utmost care, because even cargo vessels can cause significant environmental damage.*
>
> *Recommendation 115: The entire system for monitoring, planning and regulation of such traffic deserves a) reconsideration*[202] *and b) Inuit participation.*[203]

6.3.2 *Noise*

Even if no spill occurs, ship noise is one of many environmental factors which can have detrimental results.

> Marine mammals are highly vocal. Sound provides a means by which widely scattered mammals can communicate and congregate for reproductive purposes. Such "echolocation" is also used for short-range navigation, avoidance of predators, and the location of prey.
>
> The dominant source of ship-induced noise would come from propeller cavitation (the noise made by propellers churning through water). It has been calculated that in heavy ice, propeller-generated noise could rise to 197 decibels, and in open water at cruising speed, fall to 170 decibels. At these levels, an LNG carrier in the middle of Baffin Bay would dominate all but the strongest natural ambient noise sources throughout the entire bay (at the low frequencies). In more confined areas, such as Lancaster Sound, noise levels could be expected to be correspondingly higher. As ice-covered arctic waters generally have very low levels of ambient noise (with the exception of a few transient events), the introduction of the noise levels generated by the (LNG) ships would be very significant.

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[202] Proposals to this effect are also found, in greater specificity, in "The Hall Beach Incident), *op. cit.*

[203] Proposals to this effect will also be found in greater specificity, in ITC's land claims proposals.

> Insufficient information exists today to predict the "masking effect" of these noise levels on the ability of marine mammals to communicate, as hearing data are available for only 7 of the 26 species of marine mammals which live along the route that the (LNG) ships would use. Some scientists have expressed the fear that many of the whales in the area would be incapacitated if they lost the[illegible] echolocation abilities. Others have postulated that an increase in ambient noise levels could reduce the reproductive rate of certain species. In the case of the bowhead whale, which is already endangered, such a reduction could lead to extinction.[204]

This information speaks for itself.

Even where the "echolocation" system is not fully understood, it is still a documented fact that ships can at least "scare away" sea mammals. For example, Canarctic Shipping carries zinc concentrates from the Nanisivik mine in Strathcona Sound (Admiralty Inlet) to Europe on the M.V. Arctic; the following consequences were reported to the shipowners, Canarctic Shipping Co. Ltd., by the Ikajutit Hunters and Trappers Association of nearby Arctic Bay:

> In the last three years Narwhals have been moving into the Igloolik area (North Foxe Basin and Fury and Hecla Straits); two of these three years Narwhals have become entrapped and there has been a known loss of approximately one hundred and fifty Narwhals. The older hunters of the Igloolik area cannot remember Narwhals in this area previously. We have heard that the ocean is already a noisy ocean and, with the addition of an icebreaker at a critical time, is unduly disturbing the marine mammals. Observations have been made by several hunters of Narwhals moving away from approaching ships *three to six hours before the ship's arrival.* It is our opinion that when the Narwhals are disturbed from the floe-edge in Admiralty Inlet that some move to the floe-edge on Prince Regent Inlet where there is no disturbance by ships. As the floe-edge retreats in Prince Regent Inlet and the leads open up the Narwhals make their way through the Inlet to the Igloolik area. We feel that because of the Narwhals being unfamiliar with the Igloolik area and ice conditions, that they are becoming entrapped and eventually perishing. It is our opinion that if the Narwhals were not disturbed by ships during this critical time when they are along the floe-edge waiting to enter Admiralty Inlet that they would return to their initial migration route.[205]

Dispersal of other sea mammals is equally noticeable.[206]

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[204] "Arctic Pilot Project" by François Bregha *Northern Perspectives*, Vol. 10, no. 3, April - May, 1982, p. 6.

[205] Letter to Canarctic Shipping, May 13, 1982. Emphasis added.

[206] See Affidavit by David Kadluk to the National Energy Board hearings on Arctic Pilot Project, October 7, 1981. p. 3.

6.3.3 *Ship Wash*

The wash from ships can be fatal to animals:

> Some of the dens built by ringed seals on the land-fast ice of Parry Channel would be destroyed by the passage of icebreaking ships. The APP has estimated that one per cent of the seals born each year in Parry Channel could be lost.[207]

This hazard is also closely related to the consequences of ice breakage, described below.

6.3.4 *Ice Breakage*

Icebreakers leave tracks in the ice behind them:

> Although in winter these tracks would fill with a dense rubble of ice which would freeze quickly, in the spring the tracks may refreeze slowly or not at all. Even frozen, the tracks may constitute barriers to the passage of Peary caribou and hunters from Resolute travelling to Somerset Island (because of the very rough nature of the rubble).[208]

A similar concern was expressed in *The Lancaster Sound Region 1980 - 2000*: the tracks "would refreeze at varying rates during the year and not at all in the spring. Slow-freezing or unfrozen ship tracks could interfere with inter-island crossings by caribou, arctic fox, and Inuit hunters. Migratory whales could become entrapped in ship tracks. Ringed seals could be disturbed and, in some cases, destroyed during the breeding and pupping seasons in east Barrow Strait. There could also be disruption of the migrations of some sea mammals and birds that normally move through or concentrate in Lancaster Sound."[209]

The hazard extends to human life. The landfast ice is the "highway" for most of the year, and is used by Inuit accordingly. Admittedly, it develops cracks in spring; but those cracks are *predictable* from the viewpoint of experienced Inuit. When cracks become *unpredictable* due to previous icebreaking, the results can be decidedly dangerous. In the words of the Ikajutit Hunters and Trappers Association,

> We utilize the floe-edge for hunting through the winter and spring, for hunting Polar Bear and marine mammals. We have the experience and knowledge of how, where and when the ice breaks up and moves out

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[207] *Ibid.*

[208] *Ibid.*

[209] *Op. cit.*, p. 57.

> of Admiralty Inlet. There are several leads (cracks) that develop across Admiralty Inlet during the spring. As the ice melts, the leads open but the ice cannot more out very fast, as the leads are *across* the sound and these large pans (of ice) are jammed against the shore. When the ship passes through Admiralty Inlet, the track is *perpendicular to the leads;* this makes a straight edge (ship track) which allows half of the large pan to *move out* and then the other half of the large pan to move out after. The wake of the ship also tends to crack the ice for some distance back from the ship's track. Because of this icebreaking activity it has become very difficult (if not impossible) to predict or anticipate how the ice will move. This has also created the problem of restricting movement on the ice and not allowing us access to all of the hunting areas.
>
> We have been very fortunate so far that we have not had the loss of life from the ship breaking ice in Admiralty Inlet.[210]

That loss of life, however, was only narrowly averted.

Under normal circumstances, the ice on Admiralty Inlet is still passable (with caution) in early July. It does, however, require an understanding of lead patterns. In July of 1980, six hunters from Arctic Bay were on a standard hunting expedition across the Inlet. They carried the customary inventory of equipment for a lengthy journey, including a boat mounted on a sled. This boat saved their lives.

The M.V. Arctic had passed in the vicinity; the unexpected movement of ice stranded the six men, and it is only with the use of the boat that they were able to scramble back to safety. *The men were stranded for three days, and $6000 in equipment was lost.*[211]

Inuit are not prepared to accept those risks to the environment and to life and limb.

> *Recommendation 116: Plans for icebreaking activity, beyond the summer season, should be shelved until proper assurances can be given concerning impact on environment and safety. Those assurances (if any) must be satisfactory to the communities affected, and those communities must participate in the supervision of any monitoring or planning process for future off-season shipping (if any).*

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[210] Ikajutit letter to Canarctic, *op. cit.*

[211] See *Ibid.*

6.3.5 *Problems to be Avoided with Roads*

Roads can cause a series of ecological problems, from soil disturbance to impact on animals. These were canvassed in the case of the Dempster Highway, but were not considered sufficient to stop the project. In other areas, however, roads can cause unexpected difficulties.

As Asbestos Hill in Northern Quebec, a mine was transporting Asbestos fibers by trucks and loading it onto ships at Deception Bay. As a result the waters in the area became contaminated with the fibers. A study of the situation was made by a joint committee of federal and Quebec officials of the respective Environmental Protection Services. They found levels of up to 670 million asbestos fibers per litre of water on the surface of Deception Bay, compared to the 172 fibers per litre found near another asbestos mine in southern Canada at Thetford mines.[212]

It is clear that greater care must be taken in securing the cargo along such a road system.

Other contaminants may be in the road itself. Used oil, which is frequently used to maintain gravel roads, may contain PCBs which are extremely noxious. In a report done in Northern Quebec, a seal in Deception Bay was found to have *exceptionally high levels of PCBs in its fat and skin.* The liver was also found to be contaminated. Accordingly, the Inuit population was advised to *avoid consuming local seals* regularly.[213]

Although the report could not identify the road as being the source of the PCBs (they could even have blown north from southern Canada), appropriate precautions must be taken.

Finally, culverts can affect char migration. This was found in the case of Deception Bay, and the culvert had to be realligned accordingly.[214]

> *Recommendation 117: Much higher priority must be given to the security of cargo, particularly ore, along northern roads.*
>
> *Recommendation 118: Products used on northern roads must be free of contaminants.*
>
> *Recommendation 119: Alignment of northern roads (including culverts) should not interfere with animal or fish migration.*

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[212] "Rapport de Visite à Baie Deception, P.Q.", Jean Boulva, Ministère des Pêches et des Océans, & Augustin LeBeau, Ministère de l'Environnement, April, 1979.

[213] *Ibid.*

[214] *Ibid.*

6.3.7 *Summary of Environmental Viewpoint*

The Inuit viewpoint on the environmental aspects of transport were summarized by Mr. Simon Awa, President of the Baffin Region Inuit Association, in his testimony before the Senate Committee on Northern Pipelines. This commentary was with reference to the Arctic Pilot Project, but it is equally applicable to other transport projects:

> The fundamental reasons we are opposed to this project is our fear that these icebreaking tankers will affect marine mammals upon which Inuit life *depends* to such an extent that the *survival of our culture* will be profoundly threatened. . . .
>
> We do not want to see dangerous experiments conducted on what forms the very basis of our economy.
>
> We have said a thousand times that we are *not against development.* But there are *two conditions.* First, the *renewable resource economy* must be protected. Secondly, we maintain that legally and morally a *share* of this wealth belongs to us.
>
> As far as hydrocarbon transportation is concerned, there should be an independent assessment of the various methods, involving all interested parties, but it should be independent. Every scheme that has been brought before you has been brought before you by its proponents. They are bound to serve their own best interests. That is only natural. But this country should not allow the oil companies to mess around with the Arctic environment.
>
> The environment is not like us; it cannot forgive, but it can die. Senator Yuzyk told Dome that he looked upon them as frontiersmen and pioneers. Senators, remember the Inuit. We have been in the Arctic for a long time. We want to stay there for a long time. We want to be there after all the oil and gas has been taken out, but this will be possible only if the marine environment is not destroyed in the process. . . .
>
> Up until now the Inuit have not been part of the authority. There have been a lot of advisory committees set up in which Inuit are sometimes involved, but we are getting *tired of being involved only in an advisory capacity.* We want to be *included* as part of authority, and one way of reaching that goal might be through land claims settlement. Part of the reason why we want to stop, for example, the APP is that our land claims settlement has not been negotiated yet; it is at the moment in the process. If the APP is given the green light, by the time we negotiated a land claims settlement, a major part of that area would have been taken by third party interests, which is industry development.
>
> What we mean by management control and authority is that while we live in the north in our home town, all the control and authority is being exercised down here in Ottawa, and in some cases the people exercising control do not know what it is like up there. That is what we mean by being part of the management authority.[215]

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[215] *Op. cit.*, pp. 26:7, 26:21.

PART 7 REGULATORY ASPECTS

7.1 *Basic Objectives*

It is possible to outline a multiciplicity of possible objectives for a regulatory system. However, these oblectives can usually be reduced to two overriding principles:

a) to get the job done efficiently; and

b) to do so in a way which is consistent with our democratic principles.

7.2 *The "Job" to be Done*

The task ahead, to paraphrase the National Transportation Policy, is to provide *a total transportation system, providing accessibility and equity of treatment for users, in support of national, economic and social objectives which include environmental protection.*

It is clear from the multitude of concerns which have been raised by Inuit from one end of the North to the other, that a shortfall in that objective is perceived. Tagak Curley is not the only person who is "sick and tired" of the current situation.

It is far too easy for southerners, particularly officials in Ottawa, to overlook the *urgency* of this objective. Remoteness breeds complacency. Can a person who is flying comfortably from Ottawa to Saskatoon really perceive that this same vehicle is not a luxury for northerners, but can be the difference between life and death? Can he grasp northern realities? After all, it is not *his* cargo that gets dropped into the bay by sealift; it is not *his* plane that falls through the ice, because the land-based airstrip was illegal to land on; it is not *his* livelihood that is threatened by a transport megaproject; *he* is not stranded for three days on an ice-floe by a icebreaker; *his* flight route isn't "directly into the cliff"; and *he* has never had to worry about whether a family member will live long enough for the rescue plane to find its way through the inadequate facilities.

Is the regulatory system too remote and too complacent to "do the job" effectively? Glibb answers are inappropriate. However, the following *indices* should be taken into consideration:

- The CTC does not insist that a northern carrier *justify* his rate increase before introducing it. The increase takes effect simply when a piece of paper is filed. If closer surveillance were exercised (e.g. as in the case of *telephone* rates), would Nordair have increased fares to Frobisher Bay 5 times in one year, or Calm Air increased fares to Whale Cove 103% ?

- An attempt was made to correct the situation in 1981, when the CTC's "Investigation into the Complaints about the Commercial Air Service to the Baffin Island Communities" issued the following recommendation:

"It seems fair that if a carrier has a monopoly position on a route and looks to the Air Transport Committee to maintain that situation, then the carrier should *fully justify* any fare or rate increase on that route...The carrier (should be) required to *notify* each Northern community served."[216] A year has elapsed, but that simple recommendation has *not been implemented*.

- Despite the singular reliance by arctic residents on air service, most parts of the arctic have never seen a CTC *public hearing on fares and adequacy* of air service. Indeed, when Labrador requested such a hearing last year it was turned down in language which was not even diplomatic.

Perhaps it is too much to expect officials who spend over 90% of their time handling a *developed* inter-modal transportation system to appreciate the uniqueness of the North's situation. The North's transport system has been compared to Central Africa and the Amazon Basin; the latter, however, do not have the added benefit of ice. The North is a special case, and deserves to be treated as such.

There is a straightforward solution. This paper has outlined a forthright measure to integrate the North to the national transportation grid, e.g. by *simulating* a developed system through the introduction of a specific subsidy formula. This approach would be administered, by a northern transportation authority (with a handful of staff). That authority could come under the jurisidiction of the CTC or of some other agency.

The creation of such a body would have significant benefits for the regulatory process, above and beyond its administration of the subsidy formula:

1) It would relieve the busy Air Transport Committee of the burden of *responding* to the continuous series of northern fare applications and the resulting series of complaints;

2) It could potentially be vested with responsibility to survey *inter-modal options* for the North to bring it closer to a developed system. This is a function which the Air Transport Committee would consider awkward.

3) It could take on other transport-oriented responsibilities, depending on the outcome of transport-related discussions in the land claims forum.

4) Its more specialized function would place it in a better position to liaise with other northern planning functions (such as they are).

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[216] *Op. cit.* p. 79, Recommendations 9.2 and 9.3.

The foregoing discussion has focussed primarily on the consumer aspects of regulation; but the same holds true of the environmental aspects.

The *problem* has been the same, insofar as the remotemess of the North has caused complacency: despite thirty years of talk,[217] there is still no adequate *planning process* for the North. In the words of one Environment Canada report, there is a "lack of overall developmental strategy or comprehensive planning approach."[218]

This is a problem which the Inuit will tackle head-on hv proposing, for the first time, a proper planning system for the North.[219] That planning system will be presented to federal negotiators in the land claims forum. This solution, if accepted, will fill a huge gap in "getting the job done."

This endeavour will also serve an even larger purpose, from the Inuit perspective: it will *dovetail with the settlement of the land claims themselves*.

Mention should also be made of jurisdictional arrangements. The present boundary system is not conducive to an efficient administrative structure. The NWT below the treeline relies primarily upon river barges, rail ways and roads for its transportation grid. The area above the treeline has *none* of these; instead, it relies on aircraft and sealift. From a Transport standpoint, these could be two different worlds. Accordingly, it would be more efficient to treat these areas as two separate administrative entities for transport purposes. It is hoped that this will happen when the federal government approves the creation of the Nunavut Territory, as voted in the plebiscite earlier this year.

> *Recommendation 120: Steps should be initiated immediately for the creation of a northern transport authority with a mandate to administer the subsidy formula.*
>
> *Recommendation 121 : A feasibility study should immediately be undertaken on the possibility of delegating, to this authority, decision making powers re adequacy of service, and inter-modal development.*

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[217] It was in 1953 that Louis St. Laurent issued his famous complaint that "apparently we have administered these vast territories of the North in an almost continuing absence of mind." *Hansard*, Dec. 8, 1953.

[218] *Land Use Programs in Canada: Northwest Territories* Environment Canada, August 1979. p. 259

[219] This intention was expressed in *Parnagujuk*, Inuit Tapirisat of Canada 1981. pp. 53-8.

Recommendation 122: Preparatory work should be undertaken for the creation of an authority, in compliance with the Land Claims Agreements in the NWT and Labrador, responsible for monitoring, planning and regulating the environmental aspects of transport.

Recommendation 123: The above recommendations should be carried out with sufficient flexibility to blend these authorities or comply with whatever other arrangements are ultimately reached in the land claims forum.

Recommendation 124: Transport planners should view the areas above and below the treeline as two distinct regions, and should "gear up" for the time when they will be two distinct administrative regions.

7.3 *The Democratic Element*

Regulatory agencies can have a far greater inpact on the lives of northerners than the electoral process can. A decision thousands of miles from the Inuit homeland, in the confines of a regulatory agency staffed by non-elected persons, can radically change the life of an Inuk to a greater extent than it can change any other Canadian; by the same token, it can do so to a greater degree than can all the municipal, territorial and federal elected representatives put together.

For a Montrealer or a Torontonian, not even the Minister of Finance can literally change his entire cost of living at the stroke of a pen;[220] but that is the power of the CTC with respect to northerners. Nor does the Montrealer or the Torontonian usually have to fear that his environment and his very livelihood can be undercut by a FEARA decision or an NEB ruling thousands of miles away. Yet that is the situation in the North. It can be called many things; but it cannot be called the epitome of democracy.

This problem has already been recognized, to a certain extent, by the federal government. Although there is currently little movement to shift decision-making into the hands of *elected* representatives of the northern population, the government is attempting to recruit native people into the *civil service*.[221] That is a convoluted way of doing things, but it is a start.

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[220] In principle, even budgets need parliamentary approval.

[221] The Native Employment Policy and the National Indigenous Development Program, mentioned earlier, are cases in point.

Nevertheless, the notion that Inuit will someday "participate" in managing their own backyard by placing one of their own at the head of the CTC or the NEB appears, to say the least, fanciful.

This situation cannot go on indefinitely. It has been summarized in *Parnagujuk* as follows:

> The concept of self-determination is basic to the rights of all Canadians: it is the distinction between democracy and paternalism. Although we acknowledge and welcome the special contractual relationship which the law has imposed between ourselves and the federal government ("the trust relationship"), that does not mean that all decisions must be made for us. We are entitled to make our own decisions, through responsible institutions.
>
> Let us now compare (the typical southern Canadians) with the position of the typical Inuk. When he sees an objectionable project - on land that is essential for his own personal livelihood, and which has been occupied by his ancestors for 5000 years - he cannot apply to his municipality, because the municipality has no power to regulate it either. His only government recourse is to apply to Ottawa - where his lobbying pressure, as a member of a small and often misunderstood minority, is hardly earth-shattering. How can one possibly say, under such circumstances, that he enjoys the same democratic rights as other Canadians? His rights are[222] not the same, either in legal or in practical terms.

There can be little argument about the desirability of permitting the inhabitants of a region to have a real voice in deciding their future in this country for themselves. As Simon Awa pointed out, that means more than an "advisory function". According to the "theories of democracy", the representatives of the people do not simply *advise*; they actually *make decisions*.

Therefore, it is *essential* that the arctic population have a democratically constituted role within the bodies which affect arctic life. If existing structures do not lend themselves to that purpose, then *improvements must be made which will permit this to happen.*

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[222] *op.cit.* p.27.

That is part of the *mandate of the Inuit negotiators* in the so-called "land claims" forum. That exercise should be supported, not only for *democratic* principles, but also in view of *enlightened national self-interest*; in the words of observers at Queen's University,[223]

> Unlike some native groups, the Inuit contemplate a future squarely within the Canadian federation. Furthermore, that future is to be one of progress, in recognition of the complexities of modern Canadian society... Traditional pursuits must be safeguarded. But isolation, leading to economic dependency and cultural and social decline, is to be avoided. The (land claims philosophy's) consistent focus on the future, and its moderation in referring to past grievances, will help make its principles acceptable to the majority of Canadians.
>
> Many may be surprised that the Inuit are not opposed to economic and industrial development as such... Development under Inuit political control, *in harmony with Inuit needs*, is to be welcomed. The major economic flowering of the North will, it is hoped, follow the settlement...
>
> The philosophical point of departure for these proposals is that the *interests of residents are best protected and their expertise best used if decision-making is as localized as possible. Inuit desire to control their environment is difficult to deny, since they are most affected by changes in it...*
>
> In short, there is much of a general nature in Parnagujuk with which most Canadians can agree. This is a giant step, the importance of which must not be minimized.[224]

The necessity for this Inuit involvement was also recognized over a *decade ago in the transport sector*. At the previous Northern Transportation Conference in 1970, Mr. A. Stevenson of the Northern Services Division asserted:

> In our pursuit of natural resources in the North we should not overlook the effect this will have on communities and individuals, and that there should be a greater involvement of northern residents in the decision-making processes which are likely to affect them.[225]

It is now high time that this happened.

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223. Queen's University's Centre for Resource Studies and Institute for Local Government are jointly conducting a special analysis entitled *The Eastern Arctic Study*, focussing on development, municipal affairs and governmental affairs.

224. "Big Step by Inuits on Lands Claims", *Globe & Mail*, Feb. 5, 1981. p.7

225. Conference proceedings, *Op. cit.* p. 163

Recommendation 125: The residents of the Arctic (i.e. the Inuit) must have a role in all aspects of the monitoring, planning and regulation of the Arctic.

Recommendation 126: The expeditious settlement of land claims negotiations, which are intended to provide a blueprint for that participation, should be energetically supported.

PART 8 CONCLUSION

The North has been called many things over the years. One of the more unflattering analogies was "a beached whale picked at by scavengers";[226] when considering the northern transportation system, that analogy sometimes appears too close for comfort.

However, there is another analogy which would cast northern transportation in a more favourable light, and which ultimately says a great deal about Canada itself. It is an aspiration expressed by Michael Amarook,[227] which deserves the support of the transport industry, of government and of the country as a whole:

> We're tired of having the North treated like Canada's attic - a big empty space where people go only to look for things which they carry back down below. We want to be treated like the rest of the house.

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[226] *Paranagujuk, op. cit.* p. 12. In fairness, the full quotation is far more positive:

"we hereby call upon the government to view this negotiation process as the *dawn of a new vision of the Canadian north* - not the vision of 1958, relying as it did upon outside forces (mostly non-Canadian) to set off a string of Klondikes. Our vision is not a Klondike: our vision is different from the business consultant who said (in En Route Magazine, October 1979) "the secret of making money in the North is to get in fast and get out fast". The Inuit did not get in fast, and we have no intention of getting out *at all*. Our vision is of steadily growing prosperity, based upon economic forces stemming from the people themselves; it is a North which is interdependent with Canada and yet which pulls its weight in Canadian economic life; it is a North without crutches, without band-aids; it is a North where decisions can be reached for the benefit of the people, without guns pointed at our heads; it is a North where decisions are free, and where the people enjoy the liberties which all Canadians hold dear; it is a North which is treated as a living entity, instead of a beached whale picked at by scavengers."

[227] Past President and current Vice-President of ITC. Quoted in *Canadian Heritage*, June 1980. p. 24.

APPENDIX: CONSOLIDATED LIST OF RECOMMENDATIONS

Recommendation 1: The integration of Northern passengers and consumers to the national transportation grid should have higher priority than the construction of icebreakers, the dispatch of military exercises, and other sovereignty exercises. Planning and budgeting should reflect this priority.

Recommendation 2 : The Recommendation of the 1970 Northern Transportation Conference should finally be implemented by providing every Arctic municipality (including Northern Labrador) with an airstrip.

Recommendation 3 : The airstrip should have facilities up to a standard consistent with that proposed for Northern Quebec, i.e. gravel runway 3500 x 100, apron and taxiway, runway lighting, approach lights, navigational aids (NDB, VASIS, RIL, Rotative Beacon, Lighted Windsock), electrical power, access road, meteorological equipment and services, communications equipment, small terminal building, maintenance garage and equipment.

Recommendation 4 : The development of these facilities should begin immediately.

Recommendation 5 : Ice strips can be considered only an interim measure, and not a substitute for a proper airstrip.

Recommendation 6 : As proposed in Northern Quebec, every municipality with an airstrip should have a small terminal building, with shelter for passengers and equipment.

Recommendation 7 : A maximum of navigational devices should be available in the North to counteract the weather problem.

Recommendation 8 : The Canadian Transport Commission should arrange that figures on the frequency and timing of landings be part of the public record, and are relevant to all applications for licences and fare increases.

Recommendation 9 : The CTC, in considering all applications for licences, should consider the back-up capacity of an airline.

Recommendation 10 : The Northern Air Transport Association should sponsor efforts to assure that all airlines have integrated schedules so as to minimize layovers.

Recommendation 11 : The CTC should favour licence applications in which airlines propose routes which open the possibility of trans-Arctic travel, and should review this situation periodically.

Recommendation 12: The proposal to use high technology (or other means) to permit reservation and seat arrangements from all municipalities should be implemented.

Recommendation 13 : Limits on Northern baggage should be no more stringent than on southern flights.

Recommendation 14: Luggage should be tagged and segregated for easy deplaning.

Recommendation 15: Northern aircraft should have easy luggage handling capacity.

Recommendation 16 : Air carriers must place a much higher priority on timely shipment of northern cargo.

Recommendation 17 : Workers and their equipment should be delivered together.

Recommendation 18 : Customers should not be billed for cargo rendered unusable by delays.

Recommendation 19 : Air carriers should place higher priority on responding and transmitting enquiries from northern customers re delayed goods.

Recommendation 20 : Recipients of cargo should be notified on arrival.

Recommendation 21 : Credit cards and cheques should be acceptable throughout the North.

Recommendation 22 : Northern airstrips should be provided with equipment to assist boarding and deplaning by the disabled and elderly.

Recommendation 23 : Announcements concerning safety measures in aircraft should be made (in person or by tape) in English and Inuktitut.

Recommendation 24 : Wherever flight time permits meals should be served at meal time.

Recommendation 25 : Country food should be available upon request, and should in any event take priority over alcohol.

Recommendation 26 : Aisles, access to washrooms and access to emergency exists should be left unimpeded.

Recommendation 27 : Higher priority should be given to cleanliness on northern flights.

Recommendation 28 : Higher priority should be given to training of Inuktituk-speaking cabin attendants.

Recommendation 29 Sealift to people deserves a comparable subsidy to sealift of rocks, and subsidy levels should be increased accordingly.

Recommendation 30 : Sealift along the Labrador Coast should be maintained at a level no lower than at present.

Recommendation 31 : Higher priority must be given to adequate docking facilities and stacking areas.

Recommendation 32 : Foods, particularly perishables, should not be placed directly in ships' holds.

Recommendation 33: Passenger ships (e.g. in Labrador) should provide certain trips in response to community demand.

Recommendation 34 : Budgetary allocations for northern projects should be made by February, in order to permit sufficient lead-time for sealift ordering.

Recommendation 35: The proper response to high northern costs should not be to selectively reimburse a handful of northerners (usually transients), but to provide an accessible and equitable system benefitting all northerners.

Recommendation 36: The Government's policy objectives for the North and for transportation in general require that all Canadians have the benefit of a developed transportation system. The objective of a subsidy program should therefore be to reduce transportation costs to what they would be in a developed transportation system.

Recommendation 37 The objective could be expressed in quantitative terms to bring the cost of living index below LCD 115 for gateway points and a maximum of LCD 130 for any northern point.

Recommendation 38 There are two alternative approaches to achieving the objective. One would be to actually develop a more mature transportation system through construction of road infrastructure. This would cost hundreds of millions of dollars, not to mention the extensive environmental effects. The more appropriate alternative is to subsidize the modes that are presently available to be able to offer rates and fares comparable to those of a developed system. In other words, subsidy can and should be used to "simulate" a developed transportation system where it is not yet economically efficient to actually build a developed system.

Recommendation 39 A transportation authority should be created with the mandate of developing tables of comparison between northern tariffs and the tariffs of the "developed" southern transport system, e.g. via truck and bus.

Recommendation 40 The authority should further be budgeted and mandated to receive applications for tariffs, and to offer subsidies which would bring those tariffs into line with those os a developed system.

Recommendation 41 This subsidy proposal is presented to simulate the rates of a developed transportation system where it is as yet uneconomic to actually provide them. It is necessary to achieve the objectives of the federal government's transportation policy and northern policy. The program has direct causal linkage to a whole series of social, economic and political goals. Hence, the federal government should demonstrate its commitment by immediately commissioning the research and analysis necessary and creating the structures necessary for its implementation.

Recommendation 42 To counterbalance the effect of southern subsidized foods, The Bay, co-ops and other food retailers should be encouraged to enter into agreements with municipal councils and other community groups whereby country foods would be promoted in the stores and junk foods would be restricted.

Recommendation 43 Similarly, the school system should make arrangements with Inuit Cultural Institute or with other appropriate Inuit organizations for lectures on the value of country foods.

Recommendation 44: Northern carriers should offer discount fares, senior citizen discounts and other special fares comparable to the pattern of the rest of the airline industry.

Recommendation 45: Northern carriers should fully publicize such discounts to the Inuit in the various communities and regions.

Recommendation 46: Bulk discounts and other discounts should be available on cargo along the same lines as elsewhere in Canada.

Recommendation 47: Discounts should not be viewed as a substitute for across-the-board subsidized rates.

Recommendation 48: Inuit hunters should be classified as "food producers", and hence be exempted from federal sales tax on their equipment.

Recommendation 49: Inuit hunters should be eligible for the commercial refund on federal gasoline tax, and a similar refund should be negotiated for provincial "roads" tax on gasoline.

Recommendation 50: Inuit must have a proportionate stake in the employment, training and equity available for arctic transportation.

Recommendation 51: The level of Inuit employment in Arctic transport should correspond roughly to the Inuit percentage of the Arctic population; however, that does not necessarily mean that Inuit employees will be identical to southern employees.

Recommendation 52: Employment programs must adapt to northern conditions.

Recommendation 53: The objective should be to create a "pool" of qualified Inuit who can share work and yet continue traditional pursuits, rather than a standardized labour force along southern lines.

Recommendation 54: Inuit participation cannot be merely willed into existence. Any such employment program must be planned, on the basis of distinct northern realities.

Recommendation 55: The failure of quotas in the past is no proof of the inapplicability of the quota system. Corporate efforts to debunk quotas on that basis should be viewed with skepticism.

Recommendation 56: Any program for employment and training must be based on a) a sense of conviction, and b) a recognition of the distinct characteristics of the Inuit employee.

Recommendation 57: Numerical quotas deserve further study.

Recommendation 58 · The Joint Council should be given the necessary resources to do its job re federal hiring practices.

Recommendation 59: The Native Employment Policy should be extended to Crown corporations (by Cabinet order if necessary).

Recommendation 60 : The performance and dedication of Inuit employees, if given the proper conditions, will exceed comparable southern workers. Any corporate myths to the contrary should be abandoned.

Recommendation 61 : Any employment program must be worked out in close consultation with the representatives of the community or region affected.

Recommendation 62 : An atmosphere of trust must be created, even at the cost (if necessary) of a municipal veto on the project.

Recommendation 63 : The basing of northern transport employees should be in the North, and should be as decentralized as possible.

Recommendation 64 : Collective agreements and other arrangements must allow northern residents full access to employment on northern transport routes.

Recommendation 65 : Work rotations involving more than 20 days away from home should be viewed with caution.

Recommendation 66 : The work rotation should be developed in consultation with the local community.

Recommendation 67 : Inuit trainees have particular features which must be taken into account in any training program.

Recommendation 68 : Some features lead to extra cost (e.g. for travel); but these costs should be considered worth the investment.

Recommendation 69: Native organizations should have the funding, manpower and access in order to guarantee a full planning and consultancy capacity on all matters of training and employment.

Recommendation 70 : Native and northern organizations should be assisted in setting up their own training programs.

Recommendation 71 : Adult education and other courses should prepare communities for employment and training options in the transport field.

Recommendation 72 : Advance funding should be available for training programs.

Recommendation 73 : Training programs should not be subject to excessive paper burden.

Recommendation 74 : Regional Inuit organizations and municipalities should be involved at the "ground floor".

Recommendation 75 : Training programs should provide for an initial design and development phase.

Recommendation 76 : Any given training program should have a single supervisory agency.

Recommendation 77 : Workshops should be provided.

Recommendation 78 : Training programs should correspond to market realities.

Recommendation 79 : Large-scale employers should reserve positions to be filled by trainees "groomed" for that purpose.

Recommendation 80 : The above technique should be viewed as a method of developing "role-models" within communities.

Recommendation 81 : Training programs must be "advertised".

Recommendation 82 : Close cooperation should take place with local and regional groups to maximize "word-of-mouth" effects.

Recommendation 83 : Educational requirements should not bar prospective trainees who would otherwise be promising.

Recommendation 84 : "Experience" may be misleading as the ultimate guide to qualifications.

Recommendation 85 : Wherever possible, the recommendation of the community (e.g. via the municipal council) should be viewed as the single most important criterion in eligibility.

Recommendation 86 : Training courses should take place in the arctic wherever possible. Mobile training programs should be encouraged for that purpose.

Recommendation 87 : Feasibility studies should be undertaken on the relocation of various training programs to the North.

Recommendation 88 : The development of training programs by electronics means should be the subject of immediate feasibility studies,

Recommendation 89: Trainee pay scales should be competitive with northern resouce pay scales.

Recommendation 90 : Great care must be used in selecting trainers.

Recommendation 91 : Inuit trainers should be used wherever possible. Where no Inuit trainers are currently available, crash courses should be undertaken to provide them.

Recommendation 92 : Maximum attention must be paid to the initial phase of a training program.

Recommendation 93 : A trainer-trainee ratio of 1-5 or less is probably essential to produce the desired results.

Recommendation 94 : Training should be done by full-time trainers.

Recommendation 95 : Trainees should be selected in consultation with communities, the local community development officer, and/or the municipal council.

Recommendation 96 : Housing and other amenities deserve high priority.

Recommendation 97 : A very heavy work load is not only acceptable, but probably preferable.

Recommendation 98 : "Hands-on" training should begin almost immediately.

Recommendation 99 : Trainees should be given the opportunity to "show their stuff" as early as possible.

Recommendation 100 : Conditions in training situations should not be radically inconsistent with the trainee's lifestyle.

Recommendation 101 : Certain teaching methods, such as the use of questions and answers, or the use of slides, need to be adapted to different northern cultural patterns.

Recommendation 102 : The community benefits derived from a training program or employment program must be demonstrated and emphasized.

Recommendation 103 : In the long term, it should be recognized that programs will work best when the enterprise is subject to Inuit ownership and influence.

Recommendation 104: The credibility of the transport system hinges, in part, on Inuit participation. This is essential to reinforce the carrier's commitment to the locality and region.

Recommendation 105 : The creation of new airlines by Inuit must be considered a viable option.

Recommendation 106 : Existing carriers should consider the possibility of negotiating part ownership by Inuit organizations.

Recommendation 107 : Whether under the auspices of a social impact assessment or otherwise, every transport project should be evaluated for its spinoff benefits to the community.

Recommendation 108 : Agreements should be negotiated, whereby transport projects reinvest local income in local goods and services.

Recommendation 109: In the long term, Inuit participation can be foreseen from the planning stages to the administration stages. Governmental and corporate policies should gear up accordingly.

Recommendation 110 : The serious economic and cultural impact, on Inuit, of environmental degradation, must not be ignored or underestimated.

Recommendation 111: The potential for ecological degradation must be countered by proper processes for monitoring, planning and regulation.

Recommendation 112 : Inuit must be involved in the decision making aspects of these processes.

Recommendation 113 : Tanker traffic cannot be considered acceptable, under present technical and administrative conditions.

Recommendation 114 : All shipping must be scrutinized with the utmost care, because even cargo vessels can cause significant environmental damage.

Recommendation 115 : The entire system for monitoring, planning and regulation of such traffic deserves a) reconsideration[202] and b) Inuit participation.[203]

Recommendation 116 : Plans for icebreaking activity, beyond the summer season, should be shelved until proper assurances can be given concerning impact on environment and safety. Those assurances (if any) must be satisfactory to the communities affected, and those communities must participate in the supervision of any monitoring or planning process for future off-season shipping (if any).

Recommendation 117: Much higher priority must be given to the security of cargo, particularly ore, along northern roads.

Recommendation 118 : Products used on northern roads must be free of contaminants.

Recommendation 119: Alignment of northern roads (including culverts) should not interfere with animal or fish migration.

Recommendation 120: Steps should be initiated immediately for the creation of a northern transport authority with a mandate to administer the subsidy formula.

Recommendation 121 : A feasibility study should immediately be undertaken on the possibility of delegating, to this authority, decision making powers re adequacy of service, and inter-modal development.

Recommendation 122: Preparatory work should be undertaken for the creation of an authority, in compliance with the Land Claims Agreements in the NWT and Labrador, responsible for monitoring, planning and regulating the environmental aspects of transport.

Recommendation 123: The above recommendations should be carried out with sufficient flexibility to blend these authorities or comply with whatever other arrangements are ultimately reached in the land claims forum.

Recommendation 124: Transport planners should view the areas above and below the treeline as two distinct regions, and should "gear up" for the time when they will be two distinct administrative regions.

Recommendation 125: The residents of the Arctic (i.e. the Inuit) must have a role in all aspects of the monitoring, planning and regulation of the Arctic.

Recommendation 126: The expeditious settlement of land claims negotiations, which are intended to provide a blueprint for that participation, should be energetically supported.

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